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Debate on Nationalised Transport

THE chief indications of Government policy and future action as to nationalised transport, made by the Minister of Transport in the House of Commons debate earlier this week, concerned area schemes for road passenger transport, and the deferment of military service for railwaymen. Mr. Barnes' remarks on the delays to the former, that some local authorities have financial difficulties in running their undertakings and that this might lead to lessening of opposition to area schemes, display optimism, and not least as to the efficacy of the schemes, when implemented, in securing improvement in the financial results of urban undertakings. As to deferment, his statement that the problem is being considered of how to meet "both the military purposes of the personnel that are due to be called up, and at the same time marry them to the current railway needs" at least keeps the door open to deferment, though his meaning is not clear; it has been suggested that some allusion was intended to military training while at work. Mention was also made by Mr. Barnes of the need for acceleration of the procedure for adjusting the charges of the British Transport Commission, and of the delays to the Passenger Charges Scheme, 1951, and to the merchandise charges scheme (to which we referred last week); the former scheme has already been overtaken by the railway wage claims discussed below His defence of the B.T.C. financial results was on familiar lines, though with timely reminders of the Commission's liabilities, such as the interest on Transport Stock. The prophecy of transport difficulties next winter, due largely to manpower and probable coal shortages, seems only too likely to be fulfilled. The Opposition intentions were made clear by Mr. Peter Thorneycroft. Apart from the more familiar policies of abolition of the 25-mile restriction on private road hauliers (embodied in the Conservatives' Transport (Amendment) Bill) and of enabling road hauliers, driven out of business by nationalisation to start again, he outlined a scheme for reorganisation of public transport. This would involve regional boards to control all forms of transport, of a size with some possibility of "finding someone big enough to run them," and greater "flexibility and freedom" would be given to the railways.

Another Wage Demand

THE demand for a 10 per cent. increase in wages submitted earlier this week to the Railway Executive is remarkable in that it is the first concerted demand by the three railway trades unions. Emphasis is laid by the union leaders not only on the rise in prices, which has swallowed up the increases granted last February, but also on the attractiveness of the relatively higher wages in other industries, which are having serious effects on railway manpower. The new increases, if granted, are estimated to cost the British Transport Commission some £17-18 million a year, and affect 500,000 railway workers. The demand comes at a time when the Commission's requests for passenger fare and freight rate increases in respect of past rises in costs are still in the early stages of the process of examination, and illustrates the slowness of the process of adjusting charges to working costs. The increases last February, dated back to the New Year, cost £12 million in a full year, and the new addition to the B.T.C. wage bill will once more aggravate the situation.

Dividends and Wages

IT is hard to see what the Chancellor of the Exchequer hopes to effect by the scheme to limit dividends which he announced last week, apart from a political gesture of appeasement to the trade unions. The shortage of capital resources (recently noted by the British Bankers' Association in their memorandum to the Royal Commission on Taxation of Profits & Income) will be accentuated; undertakings which have been exercising restraint in dividends will be penalised more than those which have not; and investors, including many poor people who have invested savings, are treated with injustice in comparison with wage earners. Some measure of the different fortunes of the investor and the wage earner is shown in figures unchallenged in the House of Commons: in 1947-50 company dividends rose by £3 million from £824 to £827 million, and the national wage bill by £940 million; between 1938 and 1950, whilst dividends and interest increased by 61 per cent., wages rose 157 per cent. If dividends have tended to rise this year, this is largely some recognition, after restraint, of the sharper rise in wages and prices. Meanwhile, the unions will press for wage increases where they think they can obtain them, and will not be restrained by the Chancellor's gesture. The latest decisions of the railway unions to press for a further advance in pay is the answer to Mr. Gaitskell's hopes in this direction.

Mechanical Engineering Appointments

THE changes consequent on Mr. H. G. Ivatt's retirement from the position of Chief Mechanical Engineer of the London Midland Region of British Railways have now been announced by the Railway Executive. It seems clear that the opportunity has been taken for a widespread reshuffling which involves all the Regions. Details of the changes are given elsewhere in this issue, but perhaps the most remarkable feature is the transfer of both Mr. K. J. Cook and Mr. H. Randle from Swindon to Doncaster and

Derby respectively. Each retains his former status of Mechanical & Electrical Engineer and Carriage & Wagon Engineer in his new Region. The new Mechanical & Electrical Engineer at Swindon is Mr. R. A. Smeddle, who for the past two years has been Deputy Mechanical & Electrical Engineer of the Southern Region. Before that he was with the L.N.E.R. There seems no doubt from these appointments that the policy of the Railway Executive of inter-Regional transfers of senior officers is to be pursued. On more than one occasion we have expressed our doubts as to the wisdom of this course. Presumably, however, the Railway Executive is convinced that the advantages to be derived from these interchanges outweigh the more obvious disadvantages.

No G.N.R.(I.) Interim Dividends

DURING the half year ended June 30 last the Great Northern Railway of Ireland lost £406,001, or £180,966 more than in the first half of 1950. The results of working do not allow interim dividends to be paid on the guaranteed, preference, or ordinary stocks. In a statement issued after its monthly meeting, the board reiterated that on January 11 last the Dublin and Belfast Governments assured the company that pending acquisition they would meet any liabilities in maintaining services and employment, if the company was unable to do so. After being advised by the company on March 12 that the surplus of liquid resources over liquid liabilities had shrunk to £937, the Governments undertook to secure powers to implement their assurances. Not until June, however, were practical arrangements reached to finance the company's current operations, which had been burdened by increased working costs far above its capacity to bear. Even so, no arrangements have yet been reached for financing future payments under contracts for equipment required for renewals and maintenance; the placing of these contracts is in arrears since last November. Nor have the Governments yet provided due remuneration for the stockholders' capital applied to maintaining services for the public and employment for the staff.

South African Strike Settled

AS the result of an agreement between the South African Railways Administration and the Railway Artisans' Staff Association, the artisans' "improved conditions" go-slow strike, which began on June 25 was called off on July 30. The dispute arose over pay and leave increase demands which would have cost the railways in all an extra £3,300,000 and could therefore not be entertained. About 19,000 members of the staff, out of a total European staff of some 100,000 were involved. The average income of artisans was given as £75 a month; they sought 4s. instead of 3s. 6d. an hour, and 35 instead of 23 days annual leave. A conciliation board appointed by the Minister of Transport which in June recommended a general investigation into railway staff matters, was rejected by the Artisans' Staff Association because its procedure was roundabout. The strike necessitated the cancellation of forty-six trains and seriously affected the airways, whose internal services almost ceased and workshop output was reduced by about one-half. Under the agreement the artisan staff is to be grouped with the rest of the railway staff for the purpose of determining its wages and general conditions of service.

Locomotive Works Modernised

ELSEWHERE in this issue appears an illustrated article dealing with the reorganisation which has taken place at the works of the Yorkshire Engine Co. Ltd. This firm was acquired by the United Steel Companies Limited in 1945 and since then its works has been remodelled. Alterations include the replacement of older types of machine tools by modern equipment and the provision of additional floor space and an adequate area for the flow of materials. Also, approximately 60 per cent. of the covered area of the works has been re-roofed, together with the installation of new overhead cranes, some of which are floor controlled. Recently the company has re-entered the general locomotive manufacturing field with a series of standard gauge saddle-tank engines, and, in collaboration with the British Thomson-Houston Co. Ltd., has built two diesel-electric locomotives designed primarily for steelworks operating. The works is at present building "9400" class tank engines for the Western Region of British Railways.

New Ferryboat for Dover-Dunkirk Service

THE bringing into regular service earlier this week of a new ferryboat for the Dover-Dunkirk service is a sign of increasing traffic and, with the present high cost of shipbuilding, of confidence in the future. The *Saint-Germain*, which was briefly described in our January 12 issue, makes the fourth vessel for the service conveying freight wagons and sleeping cars, and, particularly in the tourist season, motorcars, jointly worked by British Railways and the French National Railways—the first occasion on which four ferries have worked it; she flies the French flag, and was built by the Elsinore Shipbuilding & Engineering Company, builders of all the modern train ferries of the Danish State Railways which convey a very similar traffic. Because of the increasing flow of lucrative freight traffic, it is problematical how far the sleeping car service (for which, in view of the British loading gauge, special cars are necessary) can be augmented, though a London-Brussels service has been suggested.

Bogie Staff Coaches for Nigeria

THE Nigerian Railway will shortly place in service ten all-steel bogie staff carriages recently completed by Cravens Railway Carriage & Wagon Co. Ltd. These form part of a contract for rolling stock required by the Nigerian Railway, to which reference was made in our January 13, 1950, and January 5, issues, when we described several types of carriages for the Nigerian Railway then in course of construction by the same firm. The exterior of the staff carriages is similar to that of the rolling stock previously described, and the interior has been suitably designed to cater for European and native maintenance staff. Accommodation is provided for 26 personnel, and comprises eight three-berth compartments for native staff and a two-berth suite for Europeans. The coaches are equipped with a cooking stove and facilities for food storage are also provided. Further details regarding the design of the new coaches are given in an illustrated article elsewhere in this issue.

Erie Railroad Centenary

ON May 14 and 15, the Erie Railroad celebrated the centenary of the inauguration of its earliest main-line constituent, the New York & Erie, connecting Piermont, on the Hudson River with Dunkirk, on Lake Erie, a distance of 446 miles. This was not only the longest railway in America at the time, but was also the first rail connection between the Great Lakes and the sea. Moreover, as the gauge was, and remained until 1880, 6 ft., this was the longest and widest continuous stretch of railway under single private ownership in the world. Though subsequent conversion to 4 ft. 8½ in. gauge was costly, the broad-gauge clearances originally provided have benefited the system until today, and the Eire is considered as a specialist carrier of outsize loads. Until 1861 a ferry service connected Piermont with New York, but in that year by leasing lines in New Jersey and tunnelling Bergen Hill, the N.Y. & E. obtained access to the Hudson at New Jersey, and its main line ran thence to Dunkirk. By acquiring controlling interests in, outright purchase of, or running powers over a wide network of lines, access was obtained first to Buffalo, and in 1887 to Chicago, since then the western terminal of the Erie system, by reason of running powers over the Chicago & Western from Hammond.

Notable Erie Locomotives

THERE were some notable early locomotives on the New York & Erie Railroad. An 1840 4-4-0 cost $8,000, of which $3,000 were paid in railway stock. In 1848, what must have been one of the earliest 4-6-0s built, was supplied to this system. Though it had outside frames, the cylinders were inside them but outside and beside the smokebox; the weight was 26 long tons of which 19 tons were on the coupled axles. Requiring a pusher locomotive, the administration ordered from Baldwins in 1850 a flexible type of 0-8-0. The two leading pairs of coupled wheels were on a "flexible beam" appearing to resemble a bogie with slight play. Until 1866 all Erie engines burnt wood, but then a comparatively modern-looking anthracite-burning 2-6-0 was acquired. It had outside cylinders, inside frames, a roomy cab, and a weight of 39½ tons, 32¼ tons being available for adhesion. Baldwins supplied some triplex articulated compound pushers in 1916 having three "engines", two under the boiler and the third under the leading end of the tender. The tractive effort was 160,000 lb., grate area 121 sq. ft., total weight of engine and tender over 380 tons, over 340 tons being adhesive. The last type of steam locomotive supplied to this railway was built in 1929. More modern motive power is diesel.

British Railways Standard Tank Engine

THE first of 54 tank engines of a new standard design for British Railways has been completed at the Brighton works of the Southern Region and is described in this issue. This locomotive, No. 80010, is a Class "4" tank engine, with a 2-6-4 wheel arrangement, and is the larger of two types of tank engine programmed for construction in 1951. The smaller engine, yet to be completed, will have a power classification 3, and a 2-6-2 wheel arrangement. The locomotives are designed for short-distance freight and suburban passenger services, and in common with previous British Railways standard locomotives will have almost universal availability over main and secondary lines throughout Britain. A feature of the design is the degree of standardisation which has been achieved with the Class "4" standard tender locomotives, of which a description appeared in our issue of June 29. The boiler is generally similar, except that the distance between tubeplates is 9 in. less in the tank engine, and the same flanged plates are used, together with a similar number of flue and small tubes. The bogie is common to all British Railways standard locomotives with bogies with plain axlebox bearings.

The "Ratepayer Pays" Fallacy

ONE of the most prevalent misconceptions relating to the nationalised transport industry of this country is that its operations constitute a charge on the taxpayer. It is frequently suggested that because the total deficit on net revenue of the British Transport Commission is now almost £40,000,000 the taxpayers are adversely affected. It has even been suggested that the affairs of the Commission and its Executives are managed less efficiently or economically than they might be "because in any event the taxpayer foots the bill."

This attitude of mind shows a lack of understanding of the provisions of the Transport Act, 1947, under which the British Transport Commission and its Executives conduct their operations, and also of the accounting and charging procedure which applies to the British Transport Commission. Nowhere in the Transport Act is there provision for any form of subsidy, assistance, or guarantee so far as revenue is concerned. The tenor of the Act is in precisely the opposite direction. The Act lays down that in effect the Commission shall conduct its business as a commercial undertaking. It authorises and enjoins it to make such charges as will secure that its revenue is not less than sufficient to meet its revenue costs "taking one year with another." So far the Commission has not been able to do this. Each year of its operation has been marked by a net revenue deficit. Presumably this has been the basis for the vague generalisation "the taxpayer pays," suggesting that in some way or other the national Exchequer makes good the Commission's deficit.

The real position is quite different. The deficit arises from the fact that the price charged for the transport service rendered, taken as a whole, is less than the total cost incurred in rendering it. That is to say, transport users since the beginning of 1948 have received transport services at less than cost. Transport users in the future are left to make good the difference. At some point of time, if the Commission's deficit is to be eliminated, the charges levied for transport services must be such as to meet the cost of providing them and leave a surplus towards the reduction of the deficit—and also, it may be remarked, towards building up the reserves which are essential to the maintenance of a healthy system, but which so far has not been possible to initiate. Meantime the deficit is financed by the liquid assets taken over by the Commission on its formation.

From the foregoing we hope it will be clear that no part of the deficit falls on the general taxpayer. It may also be added that transport users during the last three and a half years have had the benefit of low interest charges on capitalised asset values which were struck at a time when prices were much lower than at present. The impossibility of creating reserves has meant that nothing has been put on one side to meet the rising costs of replacing the assets now being consumed.

The various increases in charges since 1947 which have been, and others which will be, made by the British Transport Commission affect the taxpayer only in so far as he is also a user of transport. In this respect transport charges are in precisely the same category as price rises of shoes, clothing and so forth.

Steel Production in U.S.A.

THE size of the plant units, the purity of raw materials (resulting in a low metallurgical load), the tendency to drive units fast, and the use of high-grade fuel, including natural gas and fuel oil, are considered to be the chief causes of the high production in the U.S.A. steel industry by the British iron and steel team which has recently returned from a tour in America under the auspices of the Anglo-American Council on Productivity. The team, representing the British heavy steelmaking industry, spent five-and-a-half weeks visiting steelworks in California, Texas, and Colorado, as well as the traditional steelmaking areas in the Eastern States, and is now preparing its report. In view of the close technical links that already exist between the steel industries in the two countries, it was not expected that the visit would reveal striking new developments, but many points of interest in blast furnace, open hearth furnace, and rolling mill design and operation were noted and are now under consideration in relation to the steel industry in this country.

The development of large units of production, it was found, is helped by a price and marketing system designed to avoid interference to the flow of production arising from a high proportion of small orders, and by less exacting standards in finishing operations. Many of the smaller orders are met from stocks held by warehouses in different parts of the country. The normal manning of the plant is generally the same in the two countries; in a few cases it is lower in the U.S.A. The training of employees, other than those of supervisory grades, is less developed and incentive wage schemes are not used so extensively as in Britain. The framework of the American industry's structure in the union-management contract is "job evaluation," which the team studied closely. The advantages both to management and labour in America of both process and maintenance workers being embraced in the same trades union, were apparent. The safety record in American plants is high. Fuel in U.S.A. is relatively cheap, and fuel economy is not so vital a part of plant integration as in Britain.

Where conditions differ between Britain and U.S.A. is in the conveyance of coal and ore. The distances over

which these are carried by rail in U.S.A., both from mine to plant and from port in the case of the relatively small proportion of imported ore, are great. The team was impressed by " techniques to reduce freight costs, many of which should be applicable in Britain." Amongst these are the large-size wagons and heavy trainloads on U.S.A. railroads. How far such bulk movement is possible in Britain is a matter which will be found by the team, on examination, to be complex and debatable. Examination of the American railway tariff structure is necessary for any judgment to be formed on its effect on production costs and on the location of plants. It is remarkable that local demands for steel (as for instance by shipbuilding and canneries) in Southern California should have caused the establishment there of a plant drawing its ore from one hundred and its coal from a thousand miles away.

Ceylon Government Railway

THE annual report of the Ceylon Government Railway by the General Manager, Mr. M. Kanagasabay, dated April, 1951, refers to the administration during the year ended December 31, 1950, but the statistics included in it are in respect of the financial year ended September 30, 1950. There was a loss in working of Rs. 13,622,382, less, however, than the previous year by Rs. 2,544,893. Gross revenue, which had been increasing steadily during the three years to 1950, was Rs. 2,571,807 higher than in 1948-49, the increase being largely due to increases in third-class fares and in local goods traffic, notably rubber.

There was general improvement in coaching traffic returns, except in Indo-Ceylon and upper class traffic, the latter due to increased fares. The Indo-Ceylon traffic decreased considerably as a result of passport and other restrictions. Goods traffic returns also showed an improvement in both tonnage and earnings, but once again, Indian traffic continued to dwindle owing to trade and exchange restrictions, " and is becoming insignificant." Though every economy possible had been effected, expenditure was Rs. 26,914 higher than in the previous year. " Working expenses have maintained a fairly stable level during the last three years "—an unusual statement nowadays.

Gross receipts from all sources and total expenditure during the year compared with those for the four preceding years are shown in the table below:—

Year	Revenue	Expenditure	Working cost per train-mile
	Rs.	Rs.	Rs. Cts.
1945-46	56,308,688	52,097,685	12 54
1946-47	48,349,070	62,847,052	14 15
1947-48	52,468,355	70,862,703	13 86
1948-49	55,078,332	71,245,607	12 87
1949-50	57,650,139	71,272,521	12 47

Increased earnings from all types of traffic were secured despite intensified road competition, and the volume of traffic showed an upward trend in many cases.

There was a notable all-round improvement in operating during the year. Timekeeping had been quite satisfactory previously, but was further improved; an extension of the train control system and the provision of additional facilities for crossing trains assisted in this. A 5-m.p.h. increase in speeds enabled the coast line train services to be accelerated. Overcrowding in the Colombo area was appreciably reduced by additional suburban trains. Improved turnround and user of wagons enabled a larger tonnage of goods to be moved with fewer wagons than in the previous year.

Four narrow-gauge Hunslet diesel-mechanical locomotives were received and put to work on passenger and shunting services. In April, 1950, a special diesel *de luxe* observation car was placed in service on the broad gauge for tourist traffic and special parties. The car accommodates 30-35 passengers, and proved popular, especially for trips to Kandy and back. A vacuum locking device has been fitted to 16 covered wagons, and a further 100 are to be so equipped.

Route-mileage maintained was 809 miles of 5-ft. 6-in. gauge and 87 miles of 2-ft. 6-in.; 63 route-miles were double track. There were no major floods or washaways in 1950. Among engineering works in hand were the relining of tunnels, additional staff housing, improvements in locomotive water supplies and to facilitate traffic working, and in the track. Seven out of twelve bridge spans on order from the United Kingdom were received. Heavy repair and equivalent output from workshops was lower for locomotives, carriages, and wagons than in 1949, and corresponding unit costs were considerably higher. Both were due to more extensive repairs being necessary on over age stock and to one locomotive erecting shop being closed for two months for the erection of overhead cranes. Mr. Kanagasabay, in concluding his report, points out that new engines, carriages, and wagons were expected to arrive during 1951, and that, with this additional stock every endeavour would be made to improve services.

British Transport Commission Traffic Receipts

THE most notable feature of the advance figures of British Transport Commission receipts for some of its chief carrying activities for Period 7 (to July 15) is the improvement in British Railways passenger traffic, which was 3·4 per cent. up on the corresponding period of last year, and some 25 per cent. over the preceding period, the latter largely a seasonal increase. For the aggregate to date, the decrease over last year is now 2·5, against nearly 4 per cent. for Period 6. No definite explanation will be available until the analysis by fare categories appears later in the year, but good weather seems to have been a major cause, and possibly traffic created by the Festival of Britain.

Freight rates during Period 7 were 10 per cent. above those in force in 1950. The rises therefore of about 10 per cent. in the principal traffic receipts show that the volume of traffic remained about the same as last year, though there is no indication of major changes in flow which have affected operating. The increase of 20 per cent. over 1950 in the aggregate to date of coal receipts has (as in the case of merchandise and minerals) little significance in view of the 16⅔ per cent. increase in freight rates in May, 1950. British Railways total receipts for 28 weeks are nearly 10 per cent. over last year's.

—	Four weeks to July 15		Inc. or decr.	Aggregate for 28 weeks		Inc. or decr.
	1951	1950		1951	1950	
	£000	£000		£000	£000	
British Railways—						
Passengers	10,719	10,361	+ 358	53,189	54,580	− 1,391
Parcels, etc., by passenger train	2,614	2,491	+ 123	17,366	15,758	+ 1,608
Merchandise & livestock	7,807	7,028	+ 779	52,511	45,818	+ 6693
Minerals	2,891	2,617	+ 274	19,133	17,035	+ 2,098
Coal & coke	6,941	6,318	+ 623	48,456	40,226	+ 8,230
	30,972	28,815	+ 2,157	190,655	173,417	+ 17,238
Road Passenger Transport: Provincial & Scottish—						
Buses, coaches & trolleybuses	3,942	3,461	+ 481	21,696	19,474	+ 2,222
London Transport—						
Railways	1,228	1,068	+ 160	8,550	7,703	+ 847
Buses & coaches ...	2,757	2,449	+ 308	17,660	16,570	+ 1,090
Trolleybuses & trams ...	759	814	− 55	5,273	5,723	− 450
	4,744	4,331	+ 413	31,483	29,996	+ 1,487
Inland Waterways—						
Tolls	71	61	+ 10	460	383	+ 76
Freight charges, etc. ...	78	73	+ 5	477	461	+ 17
	149	134	+ 15	937	844	+ 93
Total	39,807	36,741	+ 3,066	244,771	223,731	+ 21,040

London Transport receipts for this period are 9·5 per cent. over last year's, and for the aggregate, nearly 5 per cent. over; this is a marked improvement compared with the preceding period. Both London Transport railway receipts for Period 7, which are nearly 15 per cent. over

last year, and bus receipts, 12·5 per cent. over, are fulfilling the intentions of the London Passenger Charges Scheme, effective from October last. In addition, the Festival and the weather have contributed to the increase over 1950. The fact that railway receipts were slightly less than for the previous period is probably accounted for by the incidence in the latter of Whitsun, though bus receipts were not affected in the same way. The total takings from the B.T.C. carrying activities shown in this series of advance figures for Period 7 were some 8 per cent. above last year.

PERCENTAGE VARIATION 1951 COMPARED WITH 1950

	4 weeks to July 15	24 weeks to July 15
British Railways—		
Passengers	+ 3·4	− 2·5
Parcels	+ 4·4	+10·2
Merchandise & livestock	+11·0	+14·6
Minerals	+10·4	+12·3
Coal & coke	+ 9·8	+20·4
Total	+ 7·4	+ 9·9
Road Passenger Transport	+13·8	+11·4
London Transport—		
Railways	+14·9	+10·9
Buses & coaches	+12·5	+ 6·5
Trolleybuses & trams	− 6·8	− 7·8
Total	+ 9·5	+ 4·9
Inland Waterways	+11·1	+11·0
Aggregate	+ 8·3	+ 9·4

Belgian National Light Railways Company

FINAL results from all services operated by the Belgian National Light Railways Company in 1950 showed net receipts of fr. 46,200,000, compared with a deficit of fr. 6,500,000 in the previous year. Earnings from non-electrified lines remained approximately the same as before, lower passenger receipts due to the transfer of traffic to bus services being offset by increases from goods transport. This result was assisted by fuel savings on goods services resulting from the extended use of diesel-powered units for traction. The administration now has 62 tractors of this type, which have been converted from former railcars by the substitution of General Motors engines and provision of appropriate ballasting to provide the necessary adhesive weight.

Among new electric vehicles placed in service have been 24 P.C.C. cars, the first of their type in Belgium. Two sections of line were electrified in 1950 and eight more are scheduled for conversion in the current year. New substations have been built and existing installations modernised. Among the new substation apparatus brought into use during the year were three 630-kW. pumpless steel tank rectifiers, supplied by the General Electric Co. Ltd., the first British rectifiers of this type in Belgium.

A comparison of operating results in 1949 and 1950 is given below:—

	1949 Fr. (millions)	1950 Fr. (millions)
Railways—		
Gross receipts (electric lines)	894·1	872·9
Gross receipts (non-electric)	220·2	220·7
Operating expenses (electric lines)	855·4	813·9
Operating expenses (non-electric)	264·7	234·8
Net railway receipts	−5·8	44·9
Bus Services—		
Gross receipts	226·6	242·2
Operating expenses	227·3	240·9
Net bus receipts	−0·7	1·3
Combined Results—		
Receipts from all services	1,340·9	1,335·8
Operating expenses	1,374·4	1,289·6
Total net receipts	−6·5	46·2

The total railway mileage worked by the company as at December 31, 1950, was 2,507 miles, to which are added 134 miles leased to other operating companies. At the same date 2,793 miles of bus routes were in operation, 1,481 miles being worked by the company and 1,312 miles by other undertakings. During the present year services on all lines of the Bruges local system which do not connect directly with interurban routes terminating in the city will be replaced by buses.

Freight Movement on British Railways

(By a Correspondent)

NUMBER 6 of *Transport Statistics* shows that freight traffic on British Railways in the four-week period to June 17 was heavy for the season of the year. Originating traffic was 1,651,000 tons above the 1950 forwardings, an increase of 7·9 per cent. The average haul of 75·86 miles was longer by fully two miles and involved the working of 11·3 per cent. additional ton-miles. Wagon-mileage was greater by 26,263,000, or 7·7 per cent., and 602,000 more train-miles were run, an increase of 5·7 per cent.

This extra traffic arose at the best time of the year for freight movement, and an average train speed of 8·68 m.p.h. for the whole system was the best since September, though 1·4 per cent. below the June, 1950, figure. With a slight increase in traffic, the Scottish Region raised its speed to 11 m.p.h., while the North Eastern Region, dealing with an 11 per cent. larger volume, slowed down slightly to 10·64 m.p.h. These speeds are beyond the reach of the other "heavy" Regions whose results are contrasted in the table below.

PERCENTAGE VARIATION BETWEEN JUNE, 1951, AND 1950

	London Midland Region	Western	Eastern
1. Tons originating:—			
Merchandise	+ 8·3	+15·5	+ 8·2
Minerals	+12·7	+12·0	+ 3·4
Coal	+10·5	+ 6·0	+10·9
Total	+10·6	+ 9·1	+ 8·7
2. Net ton-miles:—			
Merchandise	+ 9·2	+ 7·9	+20·1
Minerals	+ 9·8	+17·1	+ 2·0
Coal	+15·6	+ 9·9	+16·7
Total	+12·4	+10·8	+13·7
3. Freight train-miles	+ 5·4	+ 7·4	+ 7·0
4. Wagon-miles	+ 8·0	+ 8·4	+10·0
5. Train engine-hours in traffic	+ 5·7	+ 8·4	+ 5·7
6. Net ton-miles per train engine-hour	+ 4·9	− 1·2	+ 6·7
7. Wagon-miles per train engine-hour	+ 0·7	− 3·4	+ 3·2
8. Freight train speed	− 1·9	− 4·6	+ 1·0

The first four entries in the table show an increase in business spread over the three Regions. The last four entries indicate that the Eastern Region alone kept its working fluid. With a trainload of 1,721 tons, it produced 1,287 net ton-miles in a train engine-hour. The Western Region load was 167 tons and its output 1,159 net ton-miles. With a trainload of 186 tons, the London Midland turned out 1,131 ton-miles; it could muster a speed of only 7·38 m.p.h., against the Eastern 8·88 and the Western 8·77. In spite of the sharp fall in its operating statistics this year, the Western Region is still ahead of the London Midland Region in mobility. The former Great Western Railway used to set the pace in freight movement, with the L.N.E.R. a good second and the L.M.S.R. a poor third. For the time being the lead has passed to the eastern side of the country, which apparently has more elbow-room for handling a rush of additional traffic.

CLOSING OF STATIONS: LONDON MIDLAND REGION.—Twywell Station between Kettering and Thrapston on the London Midland Region was permanently closed for passengers, parcels, and passenger train merchandise, and for freight traffic except for private sidings, on July 30. Passengers will book to Thrapston from which town there is a bus service. Parcels and passenger train merchandise will be dealt with at Thrapston and alternative arrangements have been made for handling freight train traffic. As from the same date Thornton-in-Craven goods depot between Skipton and Colne also has been closed.

LETTERS TO THE EDITOR

(The Editor is not responsible for the opinions of correspondents)

Train Working in the South-West

July 18

SIR,—I have just returned from a week's intensive railway travel in Holiday Runabout Ticket Area 13 (Exmouth Junction-Ilfracombe and Halwill).

In all, 62 journeys were made. Departures averaged 2·74 min. and arrivals 1·42 min. late. Time recoveries included 11½ min. by the "Atlantic Coast Express" between Exeter Central and Halwill, and also by the 4.5 p.m. (S.O.) Exeter St. Davids to Barnstaple Town, in which an 8-min. late departure was made good. The black spot in all attempts at time recovery by engine crews was certainly Exeter St. Davids. Trains were held there unnecessarily, due (it seems) to lack of co-operation between station staff and signalmen. For example, on a Sunday, the 11.40 a.m. from Plymouth reached St. Davids at 2.7 p.m. (having, I suspect, been checked at Cowley Bridge Junction by the up "Cornish Riviera") and held there 15 min. The same day, the 4.9 p.m. Okehampton to Exeter left 8 min. late; the driver tried hard to regain time, and managed to pass Cowley Bridge Junction at 4.43, but St. Davids held us there 11½ min., and we reached Exeter Central 11 min. late.

The Western Region has fallen on bad days. During the week July 6-12, I believe that neither the 3.30 nor the 5.30 p.m. from Paddington reached Exeter on time, and they certainly made up no time in station work. Cannot an enquiry be held into working at Exeter St. Davids?

I congratulate the staff at Exmouth, who on arrival of a train from Exeter, in matter of seconds detach the engine when needed for the next train out—a speedy piece of work. All the coaches which we travelled in were clean and a credit to the staff concerned.

Finally, as 1,206½ miles were covered for 15s., we certainly had good value for our money: 6·7 miles for 1d.

Yours faithfully,

R. S. HAINES

Meadowleigh, Petersfield

Management of British Railways

July 13

SIR,—It is far removed from desire on my part to pass unnecessary strictures on the management of British Railways, for I know that their task is one of overwhelming magnitude and complexity. The publication of the British Transport Commission report is doubtless an honest and well-reasoned manifestation of the many difficulties besetting the management, but may it not be that the latter, confronted with all these major problems, is missing the minor irritations which only close and everyday contact with the travelling public would reveal?

Mr. John Taylor's letter in your issue of July 7 is a case in point, and does it not underline what I myself said in a previous letter, which appeared in your April 13 issue? Mr. Taylor's reference to fish vans at Euston is merited. How often in Manchester London Road and Liverpool Central have I bemoaned the absence of thought in allowing passenger stations to be the receptives for fish vans. Surely there is a way out.

The publication of the census figures shed another ray on the transport position. Among other things they reveal the fact that along our particular branch line—Manchester to Wilmslow *via* Styal—the population has doubled in 20 years. Normally this should have stimulated enterprise, but today our rail services are considerably worse than pre-war, with the result that the travelling public prefer Manchester Corporation buses which do the journey to town in 35 min.—limited stop service—as compared with the rail 25 min. At the end of the journey the use of Mayfield Station, putting passengers on arrival to the trouble of a walk of nearly a quarter of a mile to the nearest bus or taxi, is another grave fault.

There is talk of attracting men to the railway service, but the problem is not merely one of pay and conditions. The staff of any organisation will in course of time come to reflect the attitude of their patrons. All the attention of the railways and the interest of the public today appears to concentrate itself along the coaches of a few first-link trains; everything else is dowdy, apathetic, taken for granted, and excites not the slightest flutter of imagination.

Yours faithfully,

B. NEWTON BROOKS

5, Prospect Vale, Heald Green, Cheshire

Some Railway Shortcomings

July 30

SIR,—I was grateful to you for publishing in your July 20 issue my letter of July 14, even though it had to be in a slightly abridged form. I was even more grateful for your editorial article, and particularly so far the reply which it has brought from the Chairman of the Railway Executive.

As you state in your comment of July 27, Mr. Elliot has not attempted to deal with the points which were raised in my original letter, but nevertheless it is interesting to note that it has come to his attention and that he has thought fit to devote so much time to it.

I can assure the Chairman that the only thought behind my letter was to call attention to the features I outlined, and I would further assure him that if all railwaymen receive a square deal from the Railway Executive, they will not be backward in giving of their best in the interests of British Railways. It is now up to the Railway Executive to demonstrate in practical form the ideals which Mr. Elliot has pronounced.

Yours faithfully,

NEMO

Railway Efficiency

June 26

SIR,—In his letter in your June 22 issue, Mr. J. H. Laundy states that coaches numbered 51,174 in 1913. Protheroe's *Railways of the World*, published before the 1914 war, gives the number as 72,000. A *Whitaker's Almanack* gave it as 68,354, and Kirkus's *Railway Statistics* mentions the number of passengers as 1,743,318,314.

Mr. Laundy says that more to the point is the seating capacity, which increased by 176,432 between 1914 and 1949. Is this really more to the point than the reduction of some 25,000 coaches to the present total of 45,135? Many still in service were built before the 1914 war.

The heavy losses in passengers originated from the preliminary huge increase in fares. Before the 1914 war, excursions were run profitably for ¼d. a mile fares. Many old experienced railwaymen then advocated reducing ordinary fares to this level, from which they expected a traffic equal to a Bank Holiday one every day in the week, as everybody would be encouraged to travel much oftener, and for longer distances. The great expense of running excursions would also have been avoided.

The present ordinary fare is 2½d. a mile—10 times as much! Obviously, if this fare was reduced to ½d. a mile all the competitive traffic, as well as much private car travel, would be recovered from the roads. Mr. Laundy, however, claims that if ordinary fares and season-ticket rates were reduced, even to motorcoach levels, the railways would lose £56,000,000 a year; he is oblivious to the fact that they are already losing at the rate of £53,000,000 a year compared with 1947! He also fails to realise that they would recover the £100,000,000 worth of competitive traffic which he estimates road transport has won from them.

How serious the loss in ordinary-train traffic has been,

is shown in the following comparison between the four weeks ending September 5, 1948, and the four weeks of February, 1951:—

	Sept., 1948	Percentage over 1947	Feb., 1951
Full fare	6,875,000	− 14·82	4,852,000
Monthly	24,027,000	− 36·49	7,307,000
Workmen	17,671,000	+ 0·20	17,692,000
Season-ticket	22,591,000	− 10·41	17,341,000
Other	5,823,000	− 22·51	3,037,000
Excursion	13,364,000	+195·51	14,640,000
Total	90,351,000		64,869,000
	£11,784,000		£7,400,000

How cannot Mr. Laundy realise that if ordinary fares were reduced to excursion or motorcoach levels, the ordinary trains would be well filled every day in the week? In the old days, excursions were run only at holiday times. They had seating accommodation for 1,000 passengers. Now, two trains are run carrying only 500 each, which unnecessarily doubles the cost of operation and the fare.

In referring to my "passion" for larger wagons, Mr. Laundy has forgotten that many home and overseas general managers, traffic officers and others have repeatedly urged their general introduction. If this had been done, the railways would long since of emerged from their financial plight. To distract attention from their short-sightedness and follies the accountants now plaster the country with statistics, most of which are cited in percentages, without stating the actual figures. To confuse further the public mind they quote a string of engine, shunting, train, empty and loaded wagon miles, net ton-miles per engine hour, etc.—unconscious of the fact that if one-half or one-quarter the number of 20-ton or 40-ton wagons were used, all these figures would be correspondingly reduced!

Mr. Laundy says that Sir Eustace Missenden was the "guiding spirit" in the Railway Executive. The real reason why he left was, probably, that he could make no headway against incompetent accountants and others in getting these larger wagons, which he had always been in favour of. I cannot see a single properly experienced railwayman among the other names he mentions, and, in airily sweeping aside as "vague generalities" my suggestion to replace the present bodies by thoroughly experienced first-class stationmasters (whom he has affected to despise) his object is plainly evident. So I ask—as Mr. Frederick Smith has already done—who is the incubus riding the back of the administration responsible for perpetuating methods of operation which are unquestionably the reason for general inefficiency?

Yours faithfully,
E. R. B. ROBERTS

Eynesbury, St. Neots

British Transport Commission Report

July 23

SIR,—On page 43 of the British Transport Commission report appear two diagrams showing in graph form the increases in costs on British railways over the years since 1939. Also shown, for comparison, are the authorised increases in the standard charges for passenger travel, the significance of which would probably not be appreciated by most people.

Cannot the British Transport Commission produce for the public a graph comparing increased costs with the real increase in railway fares over the years as compared with 1939? This would be much more useful, and would, I think, surprise many people.

Yours faithfully,
ERIC B. DYCKHOFF

13, Outwood Drive, Heald Green, Cheshire

Publications Received

Investment in Empire.—British Railway & Steam Shipping Enterprise in India, 1825-1849. By Daniel Thorner. Philadelphia: University of Pennsylvania Press. London: Geoffrey Cumberlege, Oxford University Press, Amen House, Warwick Square, E.C.4. 8¼ in × 5¼ in. 197 pp. Price $3.75 (30s.) Railway interest in this work centres on 150 pages devoted to the pre-construction history of the railways in India. Their methodical planning as a network of trunk lines designed to serve the whole peninsula is in sharp contrast to the haphazard promotion of individual railways in the United Kingdom; their chief planner was Mr. R. M. Stephenson, whose foresight was remarkable. Among the preliminary incidents described is Mr. F. W. Simms' reconnaissance for a railway from Calcutta to Delhi in 1845-46, and the formation of the East Indian and Great Indian Peninsula Railway Companies in 1845. For three years they fought for guarantees from the East India Company of 5 per cent. interest on their capital outlay, and their subsequent success and the other clauses in their contracts—details of which are given—established a precedent for the financing of most of the later companies.

Stainless-Steel Fittings.—This booklet consists of a number of photographs of the stainless-steel fittings made by Gabriel & Co. Ltd. They include a locomotive and railway coaches fitted with stainless-steel handrails and miscellaneous fittings. Other illustrations show single-deck and double-deck road passenger vehicles fitted with stainless-steel fittings, including handrails, curtain rails, and seat stanchions.

Locomotives.—An illustrated brochure has been issued by W. G. Bagnall Limited, containing a detailed and numbered list of engine and boiler components. Locomotive diagrams correspondingly numbered are also included. The illustrations show various types of steam locomotives for branch and main-line operating which the firm has supplied for use in this country and overseas. There is also a reference to the diesel-electric locomotives built in conjunction with the Brush Electrical Engineering Co. Ltd. and its associated diesel-engine manufacturing firms.

A Pictorial Record of a British Timken Axlebox.—A booklet which is published by British Timken Limited provides an interesting pictorial record of the condition of a British Timken roller-bearing axlebox after completing 2,000,000 miles of service on the Egyptian State Railways. The amount of wear is shown by a series of half-tone illustrations of the axlebox and various components.

Spline Hobbing and Gear Cutting.—An illustrated leaflet has been published recently showing the principal features of a new spline hobbing machine, built by David Brown Machine Tools Limited. Known as the M.T.-V. machine, this equipment is also capable of producing spur and helical gears, for which a differential unit can be supplied. The capacity of the machine and its constructional details are given.

Welded Roof Trusses.—The first of a series of technical publications on welded trusses has been issued by the Quasi-Arc Co. Ltd. This is illustrated by diagrams of roof truss layouts and typical welded joints, and includes designs of trusses, purlins, and other roof members, together with calculations on loading and wind pressures. Forces on roof members, dead load, snow load, wind load, and crane load are given in tabular form. A summary of weights and sizes of roof trusses is included in the publication.

Summer Holidays in Spain, Portugal, and the Mediterranean.—Thos. Cook & Son, Limited, include a wide variety of seaside resorts and inclusive tours in their summer programme covering Spain, Portugal, the Balearic Islands, Malta, Gibraltar, and Cyprus. Amongst the lesser-known resorts are the island of La Toja, off the N.W. coast of Spain, and Torremolinos near Malaga on the Mediterranean. Besides their many other attractions, Gibraltar, Malta, and Cyprus offer the tourist a "sterling" holiday.

THE SCRAP HEAP

Backlash

Near Wellington, Kansas, a fisherman abandoned his catch after he cast his line from a railway bridge over a creek, short-circuited an automatic control system, turned every block signal red on 107 miles of track, halted 14 freight trains and three passenger expresses, stalled them all for two hours. —*From the N.Y. magazine "Time."*

A Ticket Benefactor

Holidaymakers who are impatient about queues at railway booking offices may find consolation in remembering that they would have had to wait much longer but for the ingenuity of one Thomas Edmondson. It is little more than a century ago since Edmondson, a clerk on the Newcastle and Carlisle line had the idea of a machine that would print not only the name of the station, but the date and a serial number.

It was a clumsy machine which Edmondson made in 1836, but he was able to patent it, and in the following year the Manchester & Leeds Railway adopted it. Edmondson lived to see his invention adopted by every railway, and as he had taken the precaution of patenting it, and had been able to charge a royalty of 10s. a mile per annum, he made a considerable fortune.—*From "The Glasgow Herald."*

Modern Service in an Old Setting

There is a famous street in York known as The Shambles—"Street of Butchers"—and in this old world setting the North Eastern Region of British Railways has recently opened an information bureau. From the photograph reproduced below one can get some idea of the unusual atmosphere created by the use of dummy carcases and a boar's head. We are told that this unexpected combination of past and present has aroused a good deal of interest; that the bureau is already proving its worth is shown by the large number of inquiries dealt with by the staff every day.

"Gleaming, Splendid Creatures"

A lament was sung in the House of Commons last night (Tuesday) for the "splendid, gleaming creatures of before the war." The lamenting M.P., Mr. Robert Boothby, meant those "symphonies in blue, green, and brass" of the Great Western Railway.

Then he went on: "Now they are all absolutely covered with soot and smoke. Even the great new ones of the L.N.E.R. you cannot see for dirt." Mr. Boothby was making the point that an engineman cannot take real pride in his engine or his work "if he has to drive these filthy machines." No one could tell one engine from another.—*From the "Daily Express."*

Trained Approach

Perhaps because, since the dim ages of irregular verbs and Greek Unseen, I have been a confirmed looker-out-of-the-window; perhaps, because I cannot afford anyway one of these modern motors which look like clockwork mice and all go 100 m.p.h.; or perhaps simply because I now own the railways, I still think a golfing holiday should begin by train. . . .

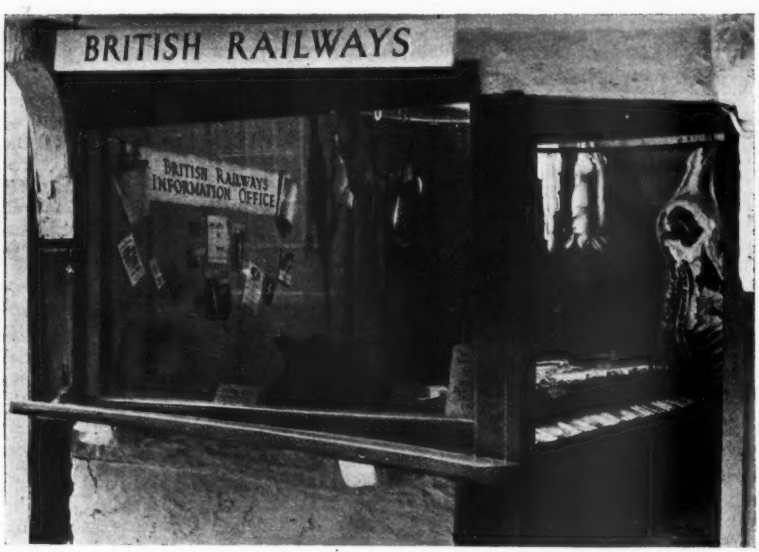
Many enchanted approaches remain, and few better than to the scene of this year's championship, Porthcawl, where the final stage bustles one along from Pyle and Kenfig with plenty of curves and cuttings, with the passenger leaning out to snatch wild flowers from the bank as he goes by, and one engine driver plucking a sort of hoop from the signalman as a talisman of his right of way.

A more spectacular scene greets the traveller to Aberdovey. . . . As the estuary of the Dovey widens, the railway shrinks humbly to a single track and winds its way along the shore, darting into little tunnels and popping out beside tiny coves with white boats lying beached on their sides.

Properly enough, though, nothing equals the approach to St. Andrews. The sleeper . . . the breakfast haddock as you rumble over the Forth Bridge . . . the little train from Leuchars, preferably with the engine going backwards . . . the Eden with all manner of bird life and possibly a few seals . . . the first distant glimpse of the old grey town . . . the 16th green hard beside the line, and at last the cry of "St'andra's! St'andra's!"—*From an article by Henry Longhurst in "The Sunday Times."*

A Small World

The G.N.R.(I.) showed a nice sense of novelty in asking the delegates to the International Advertising Conference who came to Ireland to look at the Hill of Howth. Advertising experts, accustomed to girdling the earth in high-speed airliners, seemed to welcome the chance to revert to the more leisurely and airy progression of the Howth tram, and Howth and Dublin Bay, once the morning haze lifted, contrived to look their best. At one stage, one of the G.N.R. hosts made use of a stop to point out some of the more conspicuous landmarks. When he indicated the Great and Little Sugarloafs a woman visitor said: "Why, they've got a Sugarloaf in Brazil, too. My, isn't it a small world?"—*"Quidnunc" in "The Irish Times."*



Railway information bureau in "The Shambles" at York recently opened by the North Eastern Region (see paragraph above)

Here is Treasure

All of a sudden, before my eyes,
Lay all the jewels of paradise.
Oh, what a vision of delight!
Cornflowers, blue and pink and white,
Asters and multi-coloured phlox,
Sweet Williams, dahlias, scented stocks,
Roses, creamy and dusky-red,
A lily inclining her queenly head,
As gladioli and iris vied
With the giant scabious at their side;
Carnations, tiger-lilies, too,
Sweet peas of every pastel hue.

I found them, as I was passing through,
By the escalator at Waterloo;
I forgot that summer's ardent heat
Was forging fetters around my feet.
And, as I went to catch my train,
Memory and I were home again,
With shady elms and cool, green lawns,
Velvety nights and dewy dawns,
With cornfields rippling in the breeze,
And the old church sleeping among the trees.

A. B.

OVERSEAS RAILWAY AFFAIRS

(From our correspondents)

TASMANIA

New Works at Devonport

To relieve congestion and provide for expected future extension at Devonport, a busy port on the north-west coast, new works are being put in hand involving removal of the goods yard and sheds to an area reclaimed from the River Mersey near Appledore, and re-erection of the engine shed near the junction of the branch to Melrose. The passenger station also will be re-sited.

Wage Claims

The Australian Railway Union is to apply to the Arbitration Court for a £1 marginal increase in pay for all grades on the Tasmania Government Railways. Other claims include payment of the adult rate at 18 years of age, more and better housing, three weeks' annual leave, and workshop and station amenities.

New Locomotives

Delivery of 18 steam locomotives from the United Kingdom is expected before the end of the year. Eight have been built at the Vulcan Foundry Limited, and have a tractive effort of 28,000 lb., and will be used on heavy goods trains. The remaining ten, of 18,000 lb. tractive effort, are being built at Darlington by Robert Stephenson & Hawthorns Limited, and will be used on light passenger and goods services.

WESTERN AUSTRALIA

Federation Jubilee

Participation of the Government Railways in the Golden Jubilee in 1951 of the constitution of the Commonwealth of Australia took the form of two vehicles in the procession of decorated vehicles through Perth on May 9. One vehicle was a float representing modern railway transportation, and the other a "passenger freighter" vehicle of the Railway Road Service.

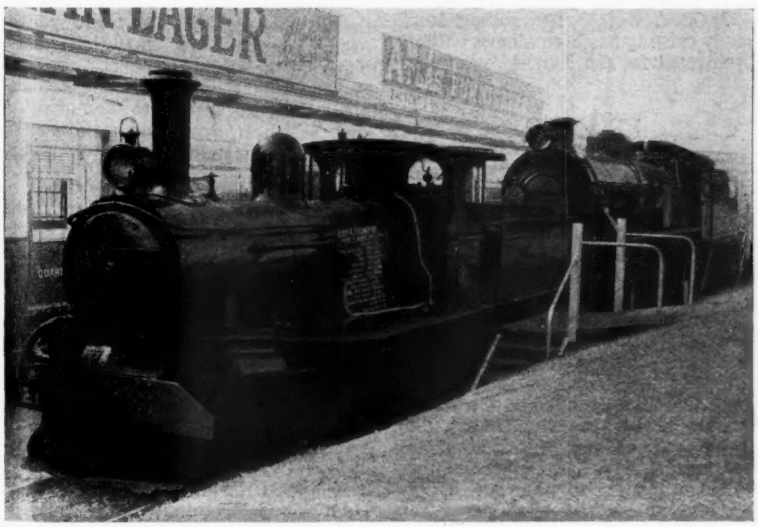
The display consisted of a neatly executed representation of a goods train of six wagons conveying major items of freight in Western Australia: wheat, wool, fertiliser, timber, coal, and fuel oil. Above the train, and in its cream and green livery, was depicted the new diesel-electric train set of the "Wildflower" class, symbolising diesel-electric railway traction. These were mounted on a lorry, on the canopy of which was a winged wheel. In front was the black swan emblem of Western Australia. Four girls in the cream and green uniform of the Railway Refreshment Services rode two on either side of the centre-piece.

Exhibition of Locomotives

Another contribution to the festivities was exhibition of two locomotives at Perth Central Station. These showed the development in locomotive construction by displaying old and new designs, including "A" (2-6-0) and "W" (4-8-2) class engines. The "A" class has coupled wheels 3 ft. 3 in. dia. and no superheater; the weight in working order is 35 tons, and maximum tractive effort 7,000 lb.

Both classes were built for the W.A.G.R. by Beyer, Peacock & Co. Ltd., but some of the nine original "A" class were built by Dübs & Company. Intended for passenger purposes, the "A" class has long since been relegated to light shunting duties. Of the nine introduced in 1885-94, five are still at work. The engine displayed was brought from the Bunbury jetty and specially prepared, with brass and copper polished and iron work painted black, and red buffer beams. The "W" class was introduced in 1951, twelve being at present in service out of 60 ordered. The locomotive shown at the exhibition was painted green and black.

Entrance to the exhibition was through the station garden in Wellington Street. Locomotive inspectors were on duty to answer questions by the public during the week of display.



Western Australian Government Railways "A" and "W" class locomotives exhibited at Perth during the Federation Jubilee celebrations

BURMA

Restoration of War-Damaged Lines

During June, the line from Waw to Sittang West was re-opened to traffic. It is now possible to travel from Pegu to Martaban (Moulmein) in one day. On the Henzada-Kyangin branch the track between Danbi and Myogwin was rehabilitated. Due to heavy rains, progress on major bridges was slowed down and in some cases work had to be suspended till the dry season.

Because of repeated acts of sabotage on all sections and excessive rainfall in the Ywataung, Mandalay, and Maymyo districts, there were delays to passenger and goods trains.

With the completion of the rebuilding of Gokteik bridge and restoration of lines in the Pegu-Martaban section, prospects of accelerated train services over important sections are bright, but the gap between miles 227 and 245/17 (Pyinmana and Tatkon) on the main line remains unclosed.

RHODESIA

Government Planning Committees

To help the railways to view their problems as far ahead as possible the Governments of Northern and Southern Rhodesia have established independent railway planning committees to assess probable traffic demands and advise the Governments on necessary railway development. The railway administration is represented on the committees, which endeavour to forecast railway requirements up to ten years ahead.

At Beira, indications are that the port will be adequate until 1955, with addition of a chrome and oil wharf now being constructed; it is then to be further expanded by two deep-water berths. It is clear, however, that still further development will be required to meet needs after 1960.

Rapid Increase in Traffic

The Minister of Transport, Mr. G. A. Davenport, has emphasised that Southern Rhodesia is "utterly dependent" on the railways. Though roads have much improved in recent years, there is as yet no macadamised high-

way system which could be used in an emergency. The European population has increased by 46,000 to 129,000 since 1946; the value of imports from £20 to £60 million; exports from £21 to £48 million; and gross output in secondary industry from £23 to £50 million.

On the railways, for the first quarter of 1951, the following increases appear over the corresponding period of 1946: train-miles 54, net ton-miles 57, coal and coke, 41, general merchandise 52, copper 39, chrome 161, and petrol 181 per cent. European staff has increased by 70 and African labour by 42 per cent., but wastage is high among the Europeans, and the labour force is insufficient for necessary expansion and improvement. Since 1948, European housing has been increased by 700 married and 500 single quarters; unsatisfactory African housing is being replaced at the rate of 2,000 quarters a year.

Operation is strained by seasonal and emergency traffic, such as tobacco in the sales season, cattle from drought-stricken areas, maize to storage at the end of the harvest and importation of additional large tonnages of maize. Internal coal traffic, already intensive, is expected to double in the next ten years. Distribution is a major problem because of the location of Wankie Colliery in relation to the rest of Northern and Southern Rhodesia.

CANADA

Canadian Pacific Results

The Canadian Pacific Railway net earnings for May were $1,039,641, a decrease of $1,366,388 compared with May, 1950. Net earnings from January 1 to the end of May were $9,747,189, an increase of $4,038,356 over the same period last year. Gross earnings for May were $37,385,177 against $32,022,334 for May, 1950, and gross earnings this year from January 1 were $170,538,674, against $144,982,842 for the same period of last year.

Iron Ore Railway

Work began during the Spring on the the 360-mile railway from Seven Islands on the Gulf of St. Lawrence to the iron ore deposits in Quebec and Labrador. Nearly 1,000 Newfoundlanders will be working on the project as the work progresses.

During the winter work proceeded at Seven Islands on the construction of temporary docking facilities and preparing the way for the great inflow of workers now taking place. Tunnels were blasted and a road built through the wilderness to make the work of the rail layers easier. When the main work began track was put down at several points simultaneously, all heading north toward Burnt Creek on the Labrador-Quebec border in the heart of the iron deposits.

When the line is built and the iron ore begins to be moved it will have a number of important implications to both Canada and the U.S. economies. The depletion of the large iron deposits in Minnesota is causing concern to steel makers in the United States, and the development of the iron resources of Ungava will mean there will be plenty of raw material available in need. This was one of the major reasons for the amalgamation of six United States steel companies with the Hollinger interests of Canada to develop the iron ore through the Iron Ore Company of Canada.

On a long-term view the driving of a railway through Ungava may have even more important implications than just ensuring an iron ore supply for the steel mills of North America. The railway will open up the whole northern territory, pushing back Canada's last frontier in the north. The opening up of this huge territory may mean new discoveries of base metals now scarce.

ITALY

Electric Railcar Services

The number of high-speed passenger services on the State Railways has been increased by use of electric railcars, which have also increased public patronage. Examples of new services so worked are Bologna-Genoa and Milan-Leghorn, both in 4 hr. 30 min.

New Electrification at 3,000 V. d.c.

The Monza-Lecco section of the Milan-Sondrio line which was previously served by three-phase 3,600-V. current has now been connected to 3,000-V. d.c. This conversion, which precedes conversion of the remaining three-phase section (Lecco-Sondrio) represents an improvement in the service from Lecco to Bergamo, due to higher running speeds and also to elimination of the changeover at Monza.

The third-rail 600-V. service between Milan and Porto Ceresio has been withdrawn, and the line is now being worked on 3,000-V. d.c. The rolling stock already existing has been almost entirely transformed for the 3,000-V. working.

FRANCE

New Freight Tariff

Railway freight rates were raised by some 5 per cent. on August 1, as announced in our July 27 issue. The rise is estimated to increase annual receipts by 11,000 million francs. The increase in the rate on coal consigned to the Paris area however, is only 2·53 per cent. The increases are to be combined with a general revision of the tariff structure, based on the real cost of transport as calculated on the volume of traffic, distance from marshalling centres, gradients and other factors. The new principle is called *nuancement*.

Thus transport to or from stations with a small volume of traffic, remote from main lines and marshalling yards, costs more than transport between two large centres For the latter the tariff is 2·5 per cent. below former rates, the increase of 5 per cent. being offset by the reduction due to *nuancement*. In the case of transport between two villages far from main lines, rates are increased by 15 per cent., due to the combined effect of the *nuancement* and the 5 per cent. increase. A wagon load of certain types of manufactured articles from Paris to Lille, for instance, will be invoiced at 2,497 francs a *tonne*. The same load from Paris to Isbergues, a small locality in Pas-de-Calais, will cost 2,790 francs, 10 per cent. more, though the distance is the same. A wagon of rice costs 2,860 francs a *tonne* from Paris to Marseilles and 3,007 francs from Paris to La Rochelle, the same distance.

Basis of "Nuancement"

Stations are classed in three categories. Each has a corresponding index 4, 5, or 6. Paris, Lyons, Marseilles, and Lille have the index 4 for their relations with the rest of the country, but the index 3 for transport between themselves or other large towns such as Rouen, Le Havre, and Bordeaux. Railway gradients are taken into consideration. Transport from Limoges to St. Etienne, across the Central Plateau costs more because of the terrain.

Nuancement, however, does not apply to all freight. Wheat, flour, fertilisers, coal, lime and mineral ores benefit by the special tariff for heavy goods in bulk, and are 60 per cent. of the total freight traffic on the S.N.C.F. The effects of *nuancement* will be felt to the maximum in manufactured products, which are among the highest in the tariff classification.

The new tariff is designed to enable the S.N.C.F. to compete effectively on profitable routes with road traffic. Critics, however, object that the new system favours the towns to the detriment of country districts and is thus an obstacle to the decentralisation of industries. One reply is that the cost of transport is not the main factor in the displacement of industries. Moreover, essential raw materials, coal, mineral, ores and others, are not affected by the new tariffs and *nuancement* does not apply to commodities such as wheat, flour, and fertilisers, of primary interest to rural communities.

Mont Blanc Road Tunnel

An international conference on the proposed road tunnel under Mont Blanc between France and Italy was opened in Paris on July 23. It is proposed to found an international company to build and operate the tunnel, with its headquarters in Geneva; the board would include French, Italian, and Swiss Government representatives, and those of tourist and other commercial interests concerned. The alternative scheme proposed by competing Swiss interests envisages a shorter road tunnel, 5½ miles long, and 31 ft. wide, connecting Switzerland with Italy under the Great St. Bernard, and east of Mont Blanc. This would be an exclusively Swiss-Italian project, unlike the Mont Blanc route.

Rolling Stock for the Nigerian Railway

Equipment of staff carriages for European and native personnel

IN our January 13, 1950, issue we referred to the heavy building programme for coaching stock and wagons with which the Nigerian Railway was faced to cope with increasing traffic, and in the same issue we described and illustrated the bogie third class carriages then being built by Cravens Railway Carriage & Wagon Co. Ltd.

The programme was further implemented by the completion of 16 third class and canteen carriages constructed by the same firm and described and illustrated in our January 5 issue. The firm has recently completed ten all-steel bogie staff carriages.

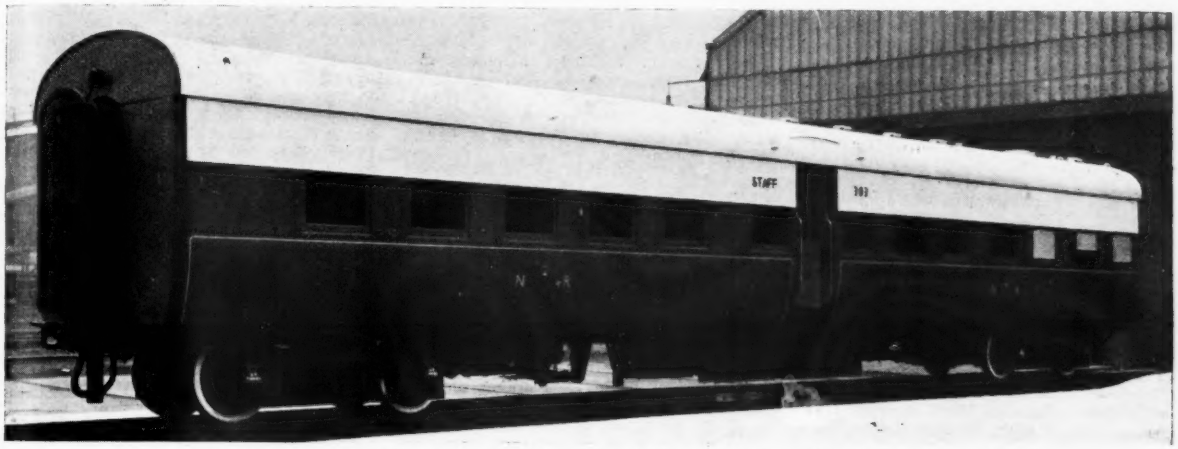
The coaches are shipped whole, painted and lettered, ready for service. They have been constructed to the requirements of Mr. T. B. Welch, Chief Mechanical Engineer, Nigerian Railway, and under the supervision and inspection of the Crown Agents for the Colonies.

Accommodation

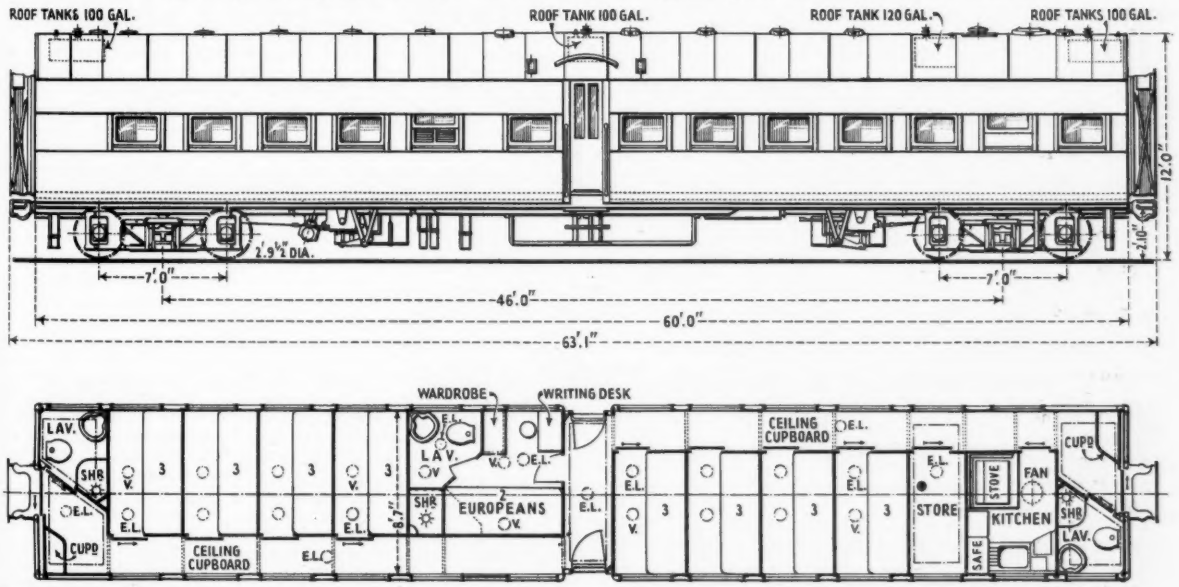
Each carriage is designed to provide living accommodation for 26 railway maintenance personnel in eight three-berth native compartments and a two-berth suite for Europeans. Access is by centre doorways; collapsible end gangway and sliding doors are provided to give access to other coaches when coupled together. Each window opening has lift-up lights and louvres, each fitted with Greenwoods sash holders; the lights are glazed with neutral tinted glass.

The European suite is situated centrally in the coach adjacent to the entrance doors, and it has two Dunlopillo mattress berths, upholstered with green Vynide, individual berth lights, a writing desk, chromium plated stool, and a wardrobe with full-length mirror. Generous drawer and cupboard space is provided and a wall-mounted electric fan is fitted. A connecting door gives access to a shower and toilet compartment which is lined throughout in stainless steel.

The native living quarters open off the longitudinal corridors and are



Bogie staff carriage for the Nigerian Railway providing European and native accommodation



Elevation and plan of the staff carriage showing principal dimensions and interior arrangements

spaced four on each side of the centre doorway. Each compartment has three berths, upholstered in brown Vynide, with Dunlopillo mattresses. The upper and lower berths are fixed; the centre berth is arranged to hinge down, forming a seat back for day use. A frameless mirror is provided, together with cupboards, extending over the corridors, for personal belongings. Toilets are provided at each end for native staff.

A food store and a kitchen are situated at one end. The kitchen contains a stainless-steel sink and a New Anchor cooking range with water boiler, and has a generous shelf and cupboard space. An electric exhaust fan is fitted in the ceiling.

Passenger communication pulls are provided in each compartment and corridor, and the cars are fitted with Stone's electric lighting. All interior facias and panelling are Gaboon veneered, arranged for easy removal to facilitate painting the interior of the steel shell during overhaul. Glass silk insulation is fitted to the ceiling panels and the sides and ends are insulated with ½-in. Insulwood. Ceilings are painted cream, and the partitions and body sides polished.

The floors are of timber, covered with linoleum, except in the kitchen, store, and toilet compartments, where the timber floor is overlaid with waterproof mottled terrazzo. The water supply for the kitchen and toilets is obtained from water tanks situated in the roof. A 100-gal. tank is provided over each of the three toilet compartments, and a 120-gal. tank over the kitchen, thus ensuring an ample water supply.

The weight and leading dimensions are as follow:—

Weight	28 tons 18 cwts. 1 qr.
Length over couplers	63 ft. 1 in.
Length over headstocks	60 ft.
Width at waist	9 ft. 2 in.
Bogie wheelbase	7 ft.
Height from rail to top of roof ...	12 ft.

The following firms as sub-contractors supplied fittings and materials for the new carriages:—

Twinberrow bogies ...	G. H. Sheffield & Co. (Engineers) Ltd.
Automatic brake equipment	Vacuum Brake Co. Ltd.
Wheels and axles ...	Owen & Dyson Limited
Roller bearing axleboxes	British Timken Limited
Non-shock couplers ...	A.B.C. Coupler & Eng. Co. Ltd.
Ventilators	Monarch Controller Co. Ltd.
Steel sheets	John Summers & Sons Ltd.
Sundeala panels and Insulwood	G. D. Peters & Co. Ltd.
Glass	Pilkington Bros. Ltd.
Vynide leather cloth ...	Imperial Chemical Industries Limited
Electric lighting ...	J. Stone & Co. Ltd.
Beclawat Metalouvres and sliding door gear	Beckett, Laycock & Watkinson Limited
Seat cushions	Dunlop Rubber Co. Ltd.
Metallic fittings ...	John Levick Limited
,, ,, ...	Joseph Kaye & Sons Ltd.
Interior panelling and partitions	Saro Laminated Wood Products Limited
Drinking water filters ...	Doulton & Co. Ltd.
Kitchen equipment ...	Smith & Greenwood Limited
,, ,, ...	Crittalls Kitchen Equipment Co. Ltd.
Water service fittings and roof tanks	John Levick Limited
Linoleum	Michael Nairn & Co. Ltd.
Roof insulation	Simpkin Machin Co. Ltd.

JOHN I. THORNYCROFT & CO. LTD.—An extraordinary general meeting of John I. Thornycroft & Co. Ltd. was held on July 31 to consider a resolution capitalising £300,000 of the general reserve funds and approving its distribution as ordinary shares of £1 each to the ordinary shareholders at the rate of one fully paid ordinary share for each ordinary share of £1 each held. The resolution was approved.

DISMANTLING A YORKSHIRE RAILWAY.—The firm of George Cohen Sons & Co. Ltd. has purchased for dismantling the railway from Pickering to Seamer in Yorkshire. This line is approximately 15 miles long. Substantial tonnages of materials in short supply will thus become available. They include 3,450 tons of rails of the bull-head type weighing 85-95 lb. a yard with accessories and 35,000 sleepers. The dismantling of eight bridges—among them two major ones over the River Derwent and the Scarborough Road—will provide several hundred tons of scrap for steelworks. The whole operation will take about nine months.

BRITISH INDUSTRIES FAIR: 1952.—With one-third of the available space in the London sections already sold, and the rate of bookings at Birmingham slightly up on last year, the organisers of the British Industries Fair to be held from May 5 to 16, 1952, are confident that the sixth B.I.F. since the war will compare with the best in the postwar period. The organisers are again extending and improving promotion plans at home and abroad and it is hoped that the attendance of overseas buyers next year will be well up to the average at each B.I.F. since 1947. Applications for the Castle Bromwich Section are coming in at a slightly higher rate than last year. The wide representation of British industry expected is one of the major points in the overseas promotion campaign launched by the organisers this year. More than 10,000,000 posters, poster stamps, and other media of publicity will be distributed throughout the world, and special advance issues of the B.I.F. catalogues, giving descriptive details of products cross-referenced in eight languages, will be available for consultation by overseas buyers well before the exhibition opens. More intensive promotion in North America, which has been confined to the U.S.A. for the past two years, will this year be extended to include Canada, an export market which is assuming ever greater importance in our economy. Canadian promotion plans have been reinforced by the appointment of an advertising agency in Toronto to handle the B.I.F. campaign.

INCREASE IN AIR TRAVEL.—There was a big increase in air travel in 1950 to and from the United Kingdom. Passenger journeys by sea and air totalled more than 6,300,000, and showed an increase of 7 per cent. over the 1949 figure, which was itself higher than any previously recorded. Of these journeys 22½ per cent. or 1,433,000 were made by air, over 21 per cent. more than in 1949, and nearly seven times as many as in 1938. Sea travel did not increase so rapidly, the 4,900,000 journeys being 3½ per cent. greater than in 1949, but still below the figures for 1937 and 1938. Air traffic with the Continent rose from 628,000 in 1949 to 808,000 in 1950, an increase of 29 per cent. which, with an increase of 6 per cent. over the 1949 figure for sea traffic, brought the figure for Continental traffic above the 1938 figure for the first time since the war.

SYMPOSIUM ON THE CORROSION OF BURIED METALS.—A symposium on the corrosion of buried metals, organised by the Iron & Steel Institute in conjunction with the British Iron & Steel Research Association and the Corrosion Group of the Society of Chemical Industry, will be held at the offices of the Iron and Steel Institute, 4, Grosvenor Gardens, London, S.W.1, on December 12. Sir Charles Goodeve, Director of the British Iron & Steel Research Association, will be in the chair. Papers will be presented in brief and discussed in groups. Subjects for discussion will cover tests on the corrosion of buried iron and steel pipes, investigations on underground corrosion, cathodic protection of buried metal structures, corrosion of buried copper and ferrous strip in natural and salted soils, and tests on the corrosion of buried copper, aluminium, and lead. Papers presented at the meeting, together with the discussions will be issued as a simple bound volume (No. 45 in the Special Report Series of the Iron & Steel Institute) and the published price will be 15s.

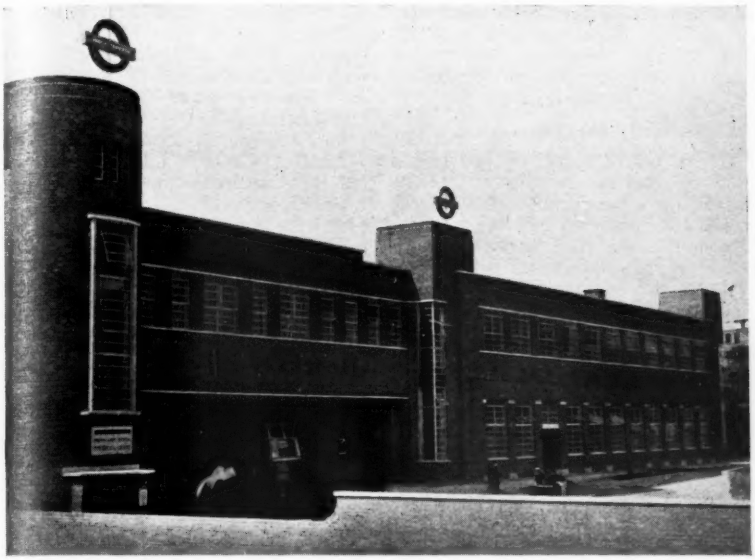
PRESSED METAL PRODUCTIVITY TEAM FROM AMERICA.—A productivity team from the American pressed metal industry, the second of the reciprocal teams to visit this country under the auspices of E.C.A., recently completed a five weeks tour of British factories. The team consisted of 15 members, led by Mr. F. C. Greenhill, President of the Acklin Stamping Company, Toledo, Ohio, and they have inspected, in the light of the report of the British team that visited the U.S.A. in 1949, some 13 pressing plants, small, medium, and large. Members of the team have expressed keen interest in the methods and techniques of production and were impressed with the speed and efficiency of British manufacture.

DUAL PURPOSE SIGNAL LAMP.—A 3-aspect signalling lamp has been developed by C. W. Denny, 8, Beaumont Court, Sutton Lane, Chiswick, London, W.4. A white, green, or red light is obtained by a push-and-pull movement of a centrally-positioned knob to which is attached a 2-colour Perspex tube which slides over a standard white bulb; a locating stop is fitted. The lamp, which is supplied with a 6-V. battery and 0·15 amp. bulb, can be fitted with a gas-proof switch. The lamp is fitted with a 2-way handle, together with a 2-way switch by which it can be used as a torch, the reflector for which is fitted below the handle and used in the horizontal position. The lamp has been designed for use in railway shunting operations and signalling.

BRITISH STANDARD FOR WROUGHT PIPE FITTINGS.—The British Standards Institution has recently published B.S. 1740: 1951, covering wrought pipe fittings, iron and steel, screwed B.S.P. thread, which provides for an extensive range of fittings for use with wrought-steel and wrought-iron pipes and includes particulars of equal sockets, hexagonal backnuts, and barrel nipples as specified in B.S. 788 and B.S. 1387. Two standard weights of fittings are provided, namely, light weight and heavy weight, except where otherwise shown. The standard covers welded and seamless wrought-steel and wrought-iron pipe fittings of nominal sizes ⅛ in. to 6 in. Copies may be obtained from the British Standards Institution, 24, Victoria Street, London, S.W.1, price 5s.

London Transport Garage at Peckham

Covered accommodation for 150 buses and maintenance facilities for 300 road vehicles



THE first garage to be built under the London Transport post-war programme is nearing completion at Peckham and is now in use. Already its introduction has afforded considerable relief to many other garages in the central area by making possible a re-allocation of bus services in South London as well as accommodating most of the vehicles required at the fourth stage of the London tram conversion scheme which took place last month.

The garage occupies a 2¼ acre site between Peckham High Street and Hanover Park, which before 1933 housed the main Tilling engineering works, and it provides covered accommodation for 150 buses. There are engineering maintenance facilities for twice that number, together with administrative offices, staff canteen and recreation room, and also the South East Divisional Medical Centre. The latter has been incorporated simply on account of its ideal siting.

Large Parking Area

The main constructional frame is of reinforced concrete with brick for the main walls. The outstanding architectural feature of the building is the parking area roof, which consists of two rows of six reinforced-concrete barrel vaults, each 110 ft. long and spanning 40 ft., the dividing beam being supported by only two intermediate reinforced-concrete columns; thus giving an almost unobstructed parking area of 52,000 sq. ft.

Entry for vehicles coming out of service is from Hanover Park, and an open vehicle reservoir has been provided to prevent congestion of the public highway. From this reservoir a bus passes to the first position in one of the three servicing lines, where it is cleaned by equipment supplied by the British Vacuum Cleaner & Engineering Co. Ltd., and replenished with oil and fuel, afterwards passing to the second position where an Essex washing machine cleans the exterior. Between the first and second positions on one of the servicing lines a roof-washing machine of London Transport design is installed, and vehicles can be directed under this on a rota basis.

Before entering the dock area vehicles undergo a process of high-pressure steam-cleaning of their chassis. Maintenance facilities are designed to cater for a total of 300 vehicles, and workshops and pits are arranged around centrally positioned stores to which access is possible without interfering with the normal processes of vehicle maintenance.

The inspection pits are divided into three groups, namely, major dock, inter dock, and rota and running shift, the first two being in the self-contained dock area and located right and left of the stores. They are enclosed for heating and ventilation purposes, and access from the main parking area to each pit is through a pair of folding Esavian doors; heat losses are therefore kept to a minimum when the doors are open for the passage of a vehicle. The rota and running shift pits are in the main parking area immediately in front of the stores, and, for use while the majority of the vehicles are out on the road, they are covered over to provide additional parking space at night.

The major dock pits are to London Transport design, as described in our issue of November 25, 1949, and differ from the prototype only inasmuch as their bridge pieces and supports are manufactured in rolled and tubular Duralumin, thus giving additional lightness and speed in use. Tecalemit pit jacks are incorporated in two major pits and one rota and running shift pit; these are operated from a central plant and each jack can be controlled independently.

All pits have fluorescent lighting

A section of the parking area showing one of the two columns supporting the beam dividing the barrel vaults of the roof

housed in aluminium castings with toughened glass front protection. The castings are designed to fit into the pit walls where they are cut back to provide manœuvring space for the operator.

Inspection pits are heated at floor level and light grilles permit the use of a pit board to increase the height of a man of short stature. Oil resisting glazed tiles are used throughout and cement faces are protected by an oil resisting enamel.

Compressed air is led to all pits, and a ring main provides draw-off points throughout the main parking area, shops, and so on. Arrangements have also been made for the future provision of direct oil and grease feeds from the stores to suitable points in the pits. Means are incorporated in the forward section of each pit for draining engine oil, which is fed by gravity to settling tanks, where it is filtered and delivered to the waste-oil store, through the medium of a float-controlled switch-operated pump. From the waste-oil store it can be delivered in bulk to a collecting lorry or barrelled for ultimate reclamation.

Engines can be run in the dock area without contaminating the air; a flexible pipe, housed in a chamber sunk in the floor area, passes over a vehicle exhaust pipe and directs the exhaust fumes to atmosphere, an extraction fan preventing back pressure.

Vacuum-cleaning points, operated from the auxiliary plant used in conjunction with the servicing lines, are placed in rear of all pits, as are wheel rests.

The machine area comes immediately in front of the major dock pits. Adjoining this area is a cleaning area for removed units, which in turn adjoins the unit store, and here, again, access to the unit store in no way interferes with normal maintenance.

Traffic Offices

Traffic offices occupy the ground floor of the administrative building and include a notice hall for the display of schedules and duty rosters and general notices to the staff. Tables are provided in a separate room for the use of conductors making up waybills and checking tickets and cash before paying in. Offices for the District Superintendent and the Chief Inspector are provided in this part of the building which also houses staff rooms.

The canteen and recreation room are at first-floor level over the traffic offices, and include a main dining room, seating 132 persons, and an administrative staff dining room for 24. The recreation room has facilities for billiards, table tennis, and other indoor games. The Medical Centre occupies the first-floor accommodation over the main exit and is designed mainly for the routine examination of staff.

The works were carried out under the general supervision of Mr. P. Croom-Johnson, Chief Engineer, London Transport Executive, while the layout of the garage was to the requirements of Mr. A. A. M. Durrant, Chief Mechanical Engineer (Road Services), and Mr. J. H. Williams, Equipment Engineer (Road Services).

The architects were Messrs. Wallis, Gilbert & Partners, in collaboration with Mr. Thomas Bilbow, Architect to the Executive, and the Consulting Constructional Engineers were Messrs. John Liversedge & Associates.

Richard Costain Limited constructed the reinforced concrete frame and foundation works and J. Jarvis & Co. Ltd. were the contractors for the general building construction. Demolition of the old structures was by the St. Mary's Demolition & Excavation Co. Ltd., and reinforced concrete piling for the new garage was by the Pressure Piling Co. Ltd.

The sub-contractors were:—

Steel sashes	Mellowes & Co. Ltd.
Patent glazing	Williams & Williams Limited
Sprinkler installation ...	Mather & Platt Limited
Grano pavings	E. J. Elgood Limited
Tiled wall linings ...	Osgood & Co. Ltd.
Ironmongery	Nettlefold & Moser Limited
Folding, sliding doors	Esavian Limited
Patent metal partitions	Art Metal Construction Co. Limited
Balustrades and handrails	William Pickford Limited
False ceilings	H. W. Cullum & Co. Ltd.
Heating and hot water installation	Benham & Sons Ltd.
Plumbing	Geo. H. Gascoigne & Co. Ltd
Barrel roof waterproofing	General Asphalte Co. Ltd.
Flat roof waterproofing	Durable Asphalte Co. Ltd.
Traffic office counter ...	D. Burkle & Co. Ltd.
Floor tiling	Semtex Limited
Roller shutters	Haskins, and G. Brady & Co. Ltd.

The "Rome Express"

The "Rome Express" on the Ligurian coast near Chiavari, Italian State Railways

Photo [R. Bisagno

Reorganisation for Locomotive Manufacture

Installation of machine tools and other equipment for the manufacture of steam and diesel locomotives

DURING the 1930s, the Yorkshire Engine Co. Ltd., which formerly built a number of locomotives for export and the home market, began to concentrate on general engineering work, which is still an important part of its business. During 1945 this firm, which was established in 1865, was acquired by the United Steel Companies Limited, and for some time particular attention was given to the design of industrial locomotives.

Recent Locomotive Orders

More recently the company has re-entered the general locomotive manufacturing field with a series of standard-gauge saddle-tank engines. Their tractive efforts at 75 per cent. boiler pressure vary from 13,860 lb. to 23,858 lb. The works are at present building "9400" class tank engines for the Western Region of British Railways.

The company has also, in collaboration with the British Thomson-Houston Co. Ltd., recently built two 0-4-0 diesel-electric locomotives of 240 h.p., designed primarily for steelworks operating.

A new range of locomotives has been designed and it includes 0-4-0 and 0-6-0 diesel-electric locomotives of from 240-400 h.p.

Recently the Meadow Hall Works of the firm has been reorganised. Manufacturing shops have been re-equipped, and modern machine tools, with self-contained motor drive, have replaced older belt-driven machines. By this means additional floor space has been made available. In addition approximately 60 per cent. of the covered area of the works has been re-roofed. A modern heating system has been installed, this consisting of two Edwin Danks high-pressure forced flow hot-water boilers, underfed by two Mirrlees stokers.

The principal shops are under one roof and direct access to the machine and fitting shops is obtained from the stores department. Adjacent to these are the boiler, tender, and locomotive erecting shops. The new equipment installed in the machine shop includes Oldfield & Schofield 14-in. and Churchill-Redman 11-in. centre lathes for general turning work. Other new equipment includes a Ward No. 10 and No. 7B combination and turret lathes together with Ward No. 3A and Herbert No. 4 capstans.

Heavier lathes for machining built-up and forged crankaxles include both Craven and Urquhart Lindsay lathes specially designed for this work. Each machine is capable of taking work up to 7 ft. dia. swing and five tons in weight. For the milling of locomotive frames a Kendall & Gent heavy-duty milling machine has been installed; this machine has a 3½-in. dia. spindle and a table 29 ft. long × 3 ft. wide. Coupling and connecting rods are machined in a Plano miller supplied by the same makers. A Stirk planing machine, has also been installed.

The boring section has been re-equipped and includes Pearn Richards No. 5 and No. 2 horizontal borers and a 4-ft. boring mill by George Richards. Also among the new equipment in the machine shop is a series of Asquith, and Kitchen & Wade 6-ft. and 4-ft. 6-in. radial drills, together with a number of Butler slotters with a capacity up to 21 in. stroke.

The toolroom forms part of the machine shop and is separated by an expanded-metal partition; it has been entirely re-equipped, and includes a Jones & Shipman twist-drill grinder, a Cincinnati tool and cutter grinder, a

Machine shop of the Yorkshire Engine Co. Ltd. after the installation of new equipment

Hammond surface grinder, and a Midgley & Sutcliffe universal miller. A Herbert jig saw filing machine and a Butler 18-in. tool room shaper are also included. Carbide-tipped tools are used in the works, and a heat-treatment gas-fired furnace supplied by British Furnaces Limited has been installed. The fitting shop machines include a Mills Oilaulic press of 30 tons capacity, and a Flextol polishing machine.

The forge and smith's shop is separated from the main shops and has been entirely re-equipped. A battery of Massey hammers from 15 cwt. to 2 tons capacity has been installed; all hammers are compressed-air operated. The furnaces, including those for heating billets, case-hardening, and normalising, are fired by coke-oven gas.

The equipment includes a battery of furnaces of sizes varying from 8 ft. to 6 ft. installed by Gibbons Bros. Ltd., together with a furnace supplied by Thermic Equipment Limited.

A normalising furnace supplied by Incandescent Heat Co. Ltd. has a capacity of 12 ft. × 4 ft. 6 in. × 1 ft. 3 in. New equipment in the boiler and tender shop includes bending rolls 12 ft. × 1 in. capacity, supplied by the Scottish Machine Tool Corporation, Kitchen & Wade 8-ft. radial drills, and a boiler shell drill by the same makers. The portable equipment includes electrically operated Holden & Hunt rivet heaters and a double chamber oil-fired Alldays & Onions rivet heater. A Hancock Circuline profile oxygen-cutting machine has also been installed.

The brass foundry is adjacent to the machine shop. The new equipment in this department includes a Morgan tilting furnace, type CAG 250, and a shot-blast cabinet supplied by Thos. W. Ward Limited. Castings are buffed on a Canning polishing machine. An electrically operated Wadkin surface planer has been installed in the pattern shop.

Nine new cranes have been installed by the Butterley Co. Ltd., and include four in the boiler shop and five in the machine shop, all of 12½ tons capacity. The cranes in the machine shop are floor controlled. Works transport has been strengthened and additional equipment includes a Ransomes & Rapier diesel-powered travelling crane of 3 tons capacity, and two Ransomes Sims & Jefferies electric trucks, type E.N.U.

Mechanical Forging Presses

Designed for high or low speeds

A NEW range of mechanical forging presses, suitable for work where high production speeds can be used to advantage, has been developed by B. & S. Massey Limited. Most forgings, and particularly those of flat shape, require a high speed of operation to keep the dwell period of the dies, and, therefore, the chilling effect on the forging, to a minimum, but in the case of extruded forgings a lower operating speed should be used.

To provide for these conditions two types of forging presses are being made by the firm, namely, a high-speed machine, type H, and a low-speed machine, type L. Type H presses are made in sizes ranging from 250 to 3,000 tons and the type L type in sizes from 250 to 1,000 tons.

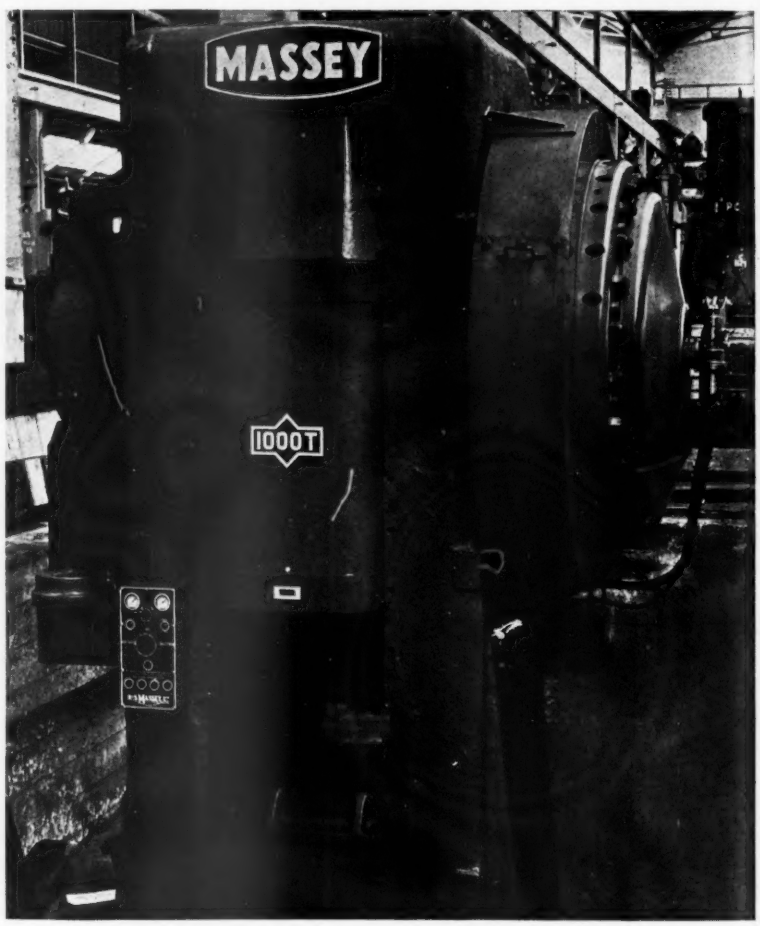
Type H presses, up to and including the 1,000-ton size, are not geared, the flywheel being mounted on roller bearings directly on the eccentric shaft. Other presses are geared. The high-speed type can be converted to the low-speed type, and *vice versa*.

The frame is a single, stress-relieved steel casting of rigid design, ensuring maximum resistance to distortion, enabling forgings to be produced within small tolerance limits. The machine incorporates an air-operated clutch, designed for heavy-duty operating.

Large Guiding Surfaces

To resist the pressures developed when off-centre work is being carried out, and to ensure accurate guiding, the ram, which is a rigid, heavily ribbed, stress-relieved, steel casting, has large guiding surfaces, together with a very strong arm, extending forward and upward, guided by additional slides in the crown of the frame. The slides are phosphor-bronze and extend the full travel of the ram; the slides are fully adjustable and renewable when worn.

The ram is counterbalanced by a pneumatic cylinder at the rear of the frame and can be arranged for water cooling if desired. The control equipment includes air-pressure gauges, a rotary control knob, two indicator neons and a selector switch. This latter acts as an isolator, and provides three alternative methods of control, continuous and single-stroke, which are obtainable by use of the pedal, and inching, which is controlled by special forward and reverse inching buttons.



Mechanical forging press of 1,000 *tons capacity*

British Railways Class "4" Standard Tank Engine

Intended for short-distance freight and suburban passenger service with maximum availability over main and secondary lines

OF the six standard types of locomotives to be built for British Railways this year, two will be tank engines, the larger having the 2-6-4 wheel arrangement and power classification 4, and the smaller, the 2-6-2 wheel arrangement and power classification 3. The erection of the first Class "4" 2-6-4 tank engine has now been completed at the Southern Region works at Brighton and is numbered 80010.

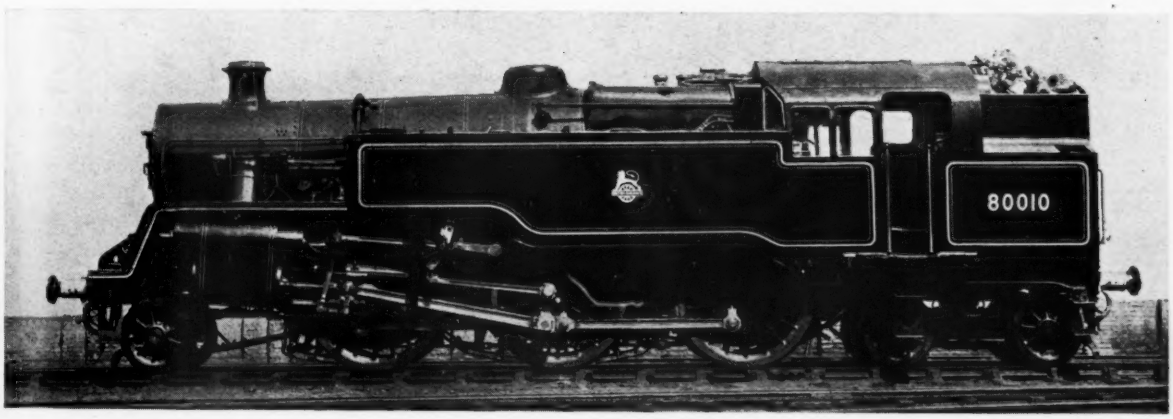
A total of 54 of these locomotives is included in the 1951 locomotive building programme, 44 of which are to be built by the Southern Region at Brighton, and ten by the London Midland Region at Derby. The manufacture of the details of the locomotives being built by the Southern Region is divided between Eastleigh, Ashford, and Brighton. The 54 locomotives will be allocated to the various Regions:—21 to the Scottish; ten to the Southern; three to the Eastern and North Eastern; and 20 to the London Midland Region. The locomotives were designed and built under the direction of Mr. R. A. Riddles, Member for Mechanical & Electrical Engineering, Railway Executive.

The parent office for the design of this class is Brighton, while certain sections have been designed at Swindon, Derby, and Doncaster. The locomotives are similar in many respects to the Class "4" 4-6-0 standard engines described and illustrated in our June 29 issue and are intended for short-distance freight and suburban passenger working. They will have almost universal availability over main and secondary lines throughout Britain. The cylinder dimensions, diameter of coupled, pony, and bogie wheels are the same as the Class "4" engines, as is also the boiler pressure, grate area, and tractive effort.

Other leading dimensions of the tank engines are as follow:—

Wheelbase, coupled	15 ft. 4 in.
Wheelbase, total	36 ft. 10 in.
Heating surface :—	
Tubes	1,223 sq. ft.
Firebox	143 sq. ft.
Total evaporative	1,366 sq. ft.
Superheater	246 sq. ft.
Adhesion factor	4·73
Weight of engine in working order	86 tons 13 cwt

The boiler follows closely the design of that of the Class "4" locomotive, of which particulars were given in our



British Railways Class "4" standard tank engine for main and secondary line short-distance operating

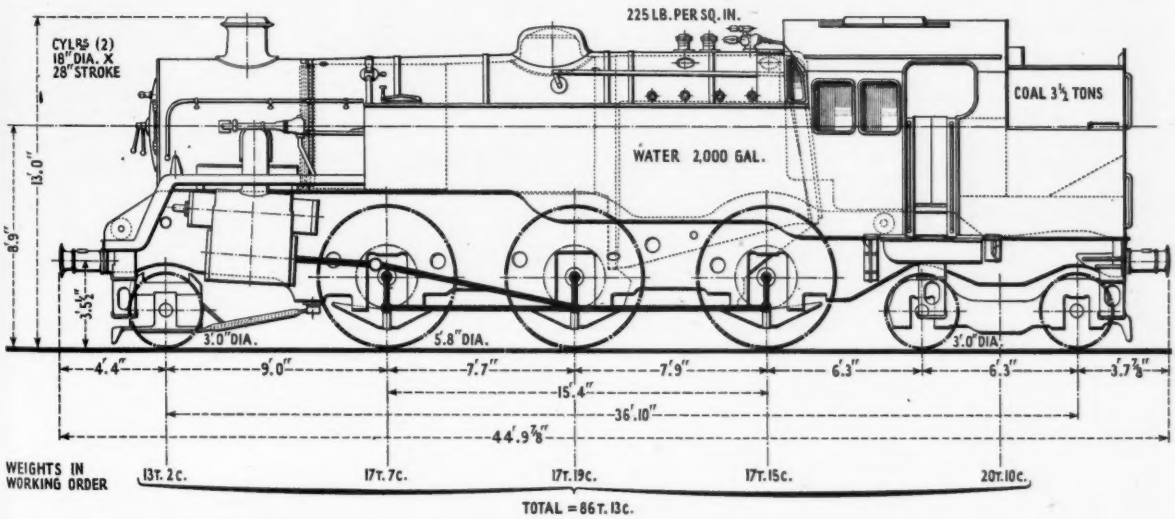


Diagram showing principal dimensions and weights of the locomotive

June 29 issue, except that the distance between tubeplates is 12 ft. 3 in. instead of 13 ft. The design of the engine frame, including the method of staging, axlebox guides, fabricated dragbox, boiler securing, and springing arrangement and adjustment is similar to that obtaining with the Class "4" engines.

The coupled wheelbase of the tank engine is 15 ft. 4 in. and this compares with 15 ft. in the Class "4" engine. Axlebox design, method of lubrication, and so on, are similar to the Class "4." The 10 in. dia. piston valves are operated by Walschaerts valve gear giving a maximum travel in 75 per cent. full forward gear of 6 3/4 in. with a steam lap of 1 1/2 in. and lead of 1/4 in. The two-bar type of slidebar is used.

The pony truck is fitted with oil-lubricated plain bearings; oil is not mechanically fed and grease lubrication is arranged for the axlebox guide faces. Helical bearings springs are used on the pony truck, with two nests of springs arranged on each side of the axleboxes. The load is transmitted to the axleboxes by means of a yoke and shoe. Sideplay control is effected by double helical springs and retarding gear. The bogie is similar in all respects to that fitted to the Class "4" and is standard for all British Railways standard locomotives equipped with plain bearings for axles.

The tanks and bunker are of welded construction throughout. Each tank has curved sides and a pressed "U"-shaped bottom, forming a structure of considerable rigidity, and is supported at the forward end on the outside slidebar bracket and at the rear end on a frame bracket. The curved form was adopted primarily for both tanks and bunker to suit loading gauge restrictions, but has also been made to conform with the profile of British Railways standard coaching stock. The tanks have a water capacity of 2,000 gal. and the bunker a coal capacity of 3 1/2 tons.

Principal Contractors

The following is a list of the principal suppliers of equipment for these locomotives:—

Vacuum brake ejector, driver's brake valve, graduable steam brake valve, and associated brake details	Gresham & Craven Limited
Self-aligning ball bearings for valve gear return cranks	Skefko Ball Bearing Co. Ltd.
Buffers	Geo. Turton, Platts & Co. Ltd.
Asbestos mattresses	Cape Asbestos Co. Ltd.
Manually-operated blowdown valve	Everlasting Valve Co. Ltd.
Mechanical lubricators for cylinder and axlebox lubrication, atomisers, and check valves	Gulf Oil Co. (Great Britain) Ltd.
Superheater elements ...	Superheater Co. Ltd.

Residential Express Service in Canada

A 4-6-4 locomotive hauling a London (Ontario) to Toronto train, Canadian National Railways, which covers the 120 miles in 140 min., with three intermediate stops

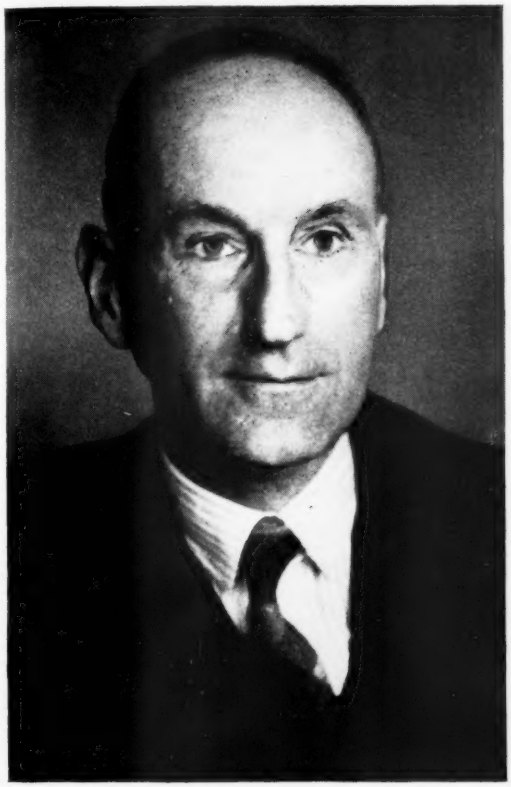
Photo] *[A. W. Leggett*

WHITE PASS & YUKON RAILWAY.—Proposals for the reorganisation of the White Pass & Yukon Railway involve the formation of a new Canadian corporation having a loan and share capital sufficient to enable it to acquire the whole of the loan and share capital of the four operating companies for a consideration to be satisfied partly in cash and partly in shares. The cash part of the consideration (which will be raised by the issue in this country of loan capital of the new Canadian corporation) will be sufficient to pay off the 5 per cent. consolidated mortgage debenture stock with all arrears of interest and the 6 per cent. income debenture stock, and to cover the claims of other creditors and estimated costs of the liquidation. It is visualised that the White Pass company will be wound up and the whole of the common shares of the new Canadian corporation will then be distributed among the shareholders.

RAILWAY NEWS SECTION

PERSONAL

On the recent abolition of the office of Chief Commissioner of Railways, India, and the reconstitution of the Indian Railway Board with three functional members (one of whom is Chairman) and the Financial Commissioner of Railways, Mr. A. K. Chanda, Financial Commissioner, became *ex-officio* Secretary to the Railway Board in financial matters.



Mr. J. Binsted

Chief Mechanical Engineer, New Zealand Government Railways, 1950-1951

Mr. R. F. Black

Appointed Chief Mechanical Engineer, New Zealand Government Railways

Mr. J. Binsted, who, as recorded in our July 20 issue, has retired as Chief Mechanical Engineer, New Zealand Government Railways, joined the Railways Department in 1911 as a mechanical engineering cadet at the old Newmarket Workshops (Auckland). After serving with the 1st New Zealand Expeditionary Force from 1916 to 1919, he remained in England for 10 months to gain further experience in certain phases of mechanical engineering. Mr. Binsted was appointed Assistant Locomotive Engineer at Auckland in 1921, and became Locomotive Engineer (later District Mechanical Engineer) at Christchurch in 1930. In 1948 he was attached to the Office of the Chief Mechanical Engineer as Assistant Chief Mechanical Engineer, and became Chief Mechanical Engineer in 1950.

The Southern Region has announced the appointment of Mr. G. R. Robinson, Assistant (Wages Staff), Regional Staff Office, Eastern Region, as Assistant Regional Staff Officer, Southern Region.

BRITISH RAILWAYS APPOINTMENTS

The Railway Executive announces that the following appointments have been made:—

Mr. J. F. Harrison, Mechanical & Electrical Engineer, Eastern & North Eastern Regions, Doncaster, to be Mechanical & Electrical Engineer, London Midland Region, Derby.

Mr. K. J. Cook, Mechanical & Electrical Engineer, Western Region, Swindon, to be Mechanical & Electrical Engineer, Eastern & North Eastern Regions, Doncaster.

Mr. R. A. Smeddle, Deputy Mechanical & Electrical Engineer, Southern Region, Brighton, to be Mechanical & Electrical Engineer, Western Region, Swindon.

Mr. J. Blair, Carriage & Wagon Engineer, London Midland Region, Derby, to be Carriage & Wagon Engineer, Scottish Region, Glasgow.

Mr. H. Randle, Carriage & Wagon Engineer, Western Region, Swindon, to be Carriage & Wagon Engineer, London Midland Region, Derby.

Mr. G. T. Smithyman, Assistant to Works Superintendent (Production Planning) Carriage & Wagon Works, London Midland Region, Derby, to be Executive Officer (Carriage & Wagon Production), Railway Executive (located Derby).

Sir Clive Baillieu, Chairman, Dunlop Rubber Co. Ltd., has been elected Chairman of the English Speaking Union.

Mr. R. F. Black, Assistant Chief Mechanical Engineer, New Zealand Government Railways, who, as recorded in our July 20 issue, has been appointed Chief Mechanical Engineer, began his railway career at Wellington in 1924 as a mechanical engineering cadet. He was appointed Assistant Locomotive Engineer at Christchurch in 1932, and Locomotive Engineer (later District Mechanical Engineer) at Wellington in 1938. Last year he was appointed Assistant Chief Mechanical Engineer. Mr. Black is a B.E. (Mech.), and is an Associate Member of the Institution of Electrical Engineers and the Institution of Mechanical Engineers.

Mr. F. H. Humphreys has been appointed Manager, Property Department, of the American Car & Foundry Company.

WESTERN REGION APPOINTMENTS

The following appointments are announced by the Western Region:—

Mr. C. W. Powell, District Operating Superintendent, Paddington, to be Assistant Operating Superintendent, Paddington.

Mr. E. P. Platt, General Assistant to Surveyor & Estate Agent, to be Assistant Estate & Rating Surveyor, Paddington.

Mr. E. C. Bourne, District Motive Power Superintendent, Kentish Town, London Midland Region, to be District Motive Power Superintendent, Old Oak Common Depot, Western Region.

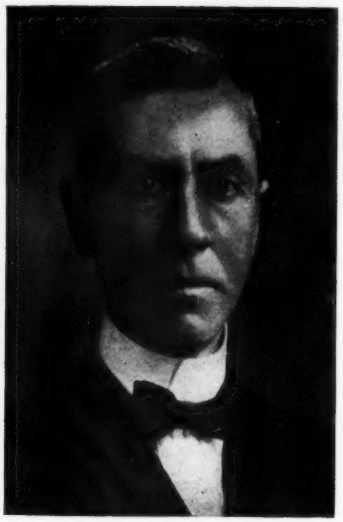
Mr. W. G. W. Reid

General Manager, Madras & Southern Mahratta Railway, 1947-51; recently appointed Railway Consultant, London, Indian Railway Board

Lafayette [*Glasgow*

The late Mr. John Ballantyne

Chief Officer for Scotland, L.M.S.R., 1932-41



The late Mr. William Cleaver

Divisional Docks Engineer, G.W.R., Barry Docks, 1928-30

Mr. W. G. W. Reid, General Manager, Madras & Southern Mahratta Railway, India, who retired from that post in April, has recently been appointed Railway Consultant in London to the Ministry of Railways in the Government of India. He entered the Great Eastern Railway locomotive works as a premium apprentice, and served in the shops from 1913-16. He then joined the R.N.A.S., and was engaged on the construction maintenance and test flying of airships. Mr. Reid was demobilised in 1919, and rejoined the G.E.R. in the drawing office. During this period he also lectured at the G.E.R. Mechanics Institute Stratford. He was appointed Assistant Locomotive Superintendent, Madras & Southern Mahratta Railway in 1922, and was promoted Assistant Mechanical Engineer, Senior Scale, in 1931. He held charge of both metre and broad gauge locomotive and carriage shops for six years. Mr. Reid was placed on special duty in connection with the inauguration of a cost accounting system for the mechanical workshops in 1934; and again in 1939, in connection with the improvements of standards of maintenance in the locomotive running sheds. He occupied successively the positions of Deputy Chief Mechanical Engineer (1940-43) and Chief Mechanical Engineer (1944), and later was appointed a member of the Depreciation Fund Committee set up by the Railway board to inquire into the lives of assets on the Indian Government Railways. Mr. Reid was afterwards placed on special duty with the Railway Board, and was made Director, Mechanical Engineering; being confirmed in that post in 1945. He was appointed to officiate as General Manager, M.S.M.R., in February, 1947, and was confirmed in that position later that year. While holding the post of General Manager of the Madras & Southern Mahratta Railway he was appointed as a member of the West Coast Port Development Committee to consider the provision of a major Port between Cochin and Bombay.

M. Pierre Tissier, President of the Council of Administration of the French National Railways, was recently awarded the insignia of Commander of the Legion of Honour by M. Vincent Auriol, President of the French Republic, for services rendered in the French Resistance.

We regret to record the death on July 26 of Mr. John Ballantyne, O.B.E., Chief Officer for Scotland, L.M.S.R., from 1932 to 41, who began his railway career as a junior clerk in the clerical department of the Caledonian Railway at Beattock Station in 1892. After training at various stations he was appointed Relieving Agent, Chief Goods Manager's Office, in 1897. In 1911 he was selected as Chief of the Accounts Office, Glasgow, and after being Chief Clerk to the Outdoor Goods Manager and Assistant to the Chief Goods Manager, he was promoted to be Goods Manager in 1918. When the Caledonian was absorbed into the L.M.S.R. in 1923, Mr. Ballantyne was appointed General Superintendent, Northern Division, L.M.S.R. In 1924 he became Goods Manager, Northern Division, and was promoted to be Chief Goods Manager, Euston, in 1927. He returned to Glasgow in 1932, when he was appointed to the then new post of Chief Officer for Scotland, and in this capacity was responsible for the operation of L.M.S.R. trains, road vehicles, and ships. Mr. Ballantyne retired from the railway service in 1941.

We regret to record the death, at the age of 75, of Commander J. K. L. Ross, Director, Canadian Pacific Railway.

Mr. D. Delaney, Chief Rates Clerk, Coras Iompair Eireann, has been appointed Assistant Commercial Superintendent.

The Railway Executive announces that Mr. F. J. Pepper, Outdoor Superintendent, Carriage & Wagon Engineering Department, Scottish Region, has been appointed Executive Officer (Wagons), Railway Executive Headquarters.

Mr. N. K. Misra, Divisional Superintendent, Allahabad, East Indian Railway, has retired, and has been succeeded by Mr. Ghansiam Dickshit. During 1949 Mr. Misra acted for a time as Chief Operating Superintendent.

We regret to record the death on July 26, at the age of 78, of Mr. William Cleaver, M.I.C.E., who retired in 1930 as Divisional Docks Engineer, G.W.R., Barry Docks. Mr. Cleaver, who was born at Onllwyn, Glamorganshire, and educated at Neath, served a pupilage from 1888 to 1891 with Taylor & Sons Limited, Briton Ferry, and was appointed junior draughtsman in 1892 and subsequently became Chief Draughtsman & Works Assistant. In 1898 he joined the Port Talbot Railway & Docks Company as Chief Assistant to the Resident Engineer on the construction and maintenance of the new docks and railways. He was appointed Chief Engineer in 1905 and held that position until the absorption of the company in the G.W.R., when he became Resident Docks Engineer at Newport. In 1925 he was appointed Resident Docks Engineer for Newport, Barry and Penarth, and in 1928 became Divisional Docks Engineer, G.W.R., Barry Docks. Mr. Cleaver was President of the Permanent Way Institution from 1914 to 1920.

Mr. F. A. Hurst, a Managing Director of Samuel Osborn & Co. Ltd. has been elected Chairman of the company.

Mr. J. E. Owston has been elected to the board of Cravens Railway Carriage & Wagon Co. Ltd. and has been appointed Deputy Managing Director.

Mr. C. F. King has relinquished the office of representative of the Institute of Transport on the National Committee on Road Transport Education. The Institute's representative is now the Chairman of the Examinations Committee, Mr. D. R. Lamb, Past President.

The English Electric Co. Ltd. has announced that Sir John H. Woods, who has relinquished his appointment as Permanent Secretary of the Board of Trade, is shortly taking up an appointment with the group.

Mr. John Eccles, Staff Assistant to the Motive Power Superintendent, London Midland Region, and Chairman of the management side of No. 2 Sectional

Council Sub-Committee, who is retiring, was recently entertained to dinner by the management and staff side of No. 2 Sectional Council. During the evening Mr. J. Murphy, Chairman of the staff side, presented him with a pair of binoculars and a plated horseshoe on behalf of the Council. Among those present was Mr. F. W. Abraham, Motive Power Superintendent, London Midland Region, British Railways.

The Minister of Transport presented the King's Police Medal to Mr. W. B. Richards, Chief Officer of the British Transport Commission Police, at the Ministry of Transport on Thursday, August 2.

We regret to record the death on July 25, at the age of 82, of Mr. William T. Gibson, who retired in 1946 as Head of the Stores Department of Messrs. Livesey & Henderson, Consulting Engineers. Mr. Gibson had served with the firm for more than 62 years.

Following the non re-election, at the instance of the Iron & Steel Corporation, of Sir Arthur Matthews and Mr. M. Firth as Directors of Thos. Firth & John Brown Limited, Lord Aberconway, Chairman, has resigned from the board of the company. Subsequently, Sir Allan J. Grant and Messrs. J. Wortley Fawcett, S. W. Rawson, Charles McLaren and Eric Mensforth have resigned their directorships of the company.

The British Non-Ferrous Metals Federation has appointed the following officers for the year 1951-52:—

President: Mr. W. J. Terry; Past Presidents: Messrs. Horace W. Clarke, William H. Henman; Vice-Presidents: Messrs. H. E. Jackson, H. C. Gibbins, W. F. Brazener; Treasurer: Mr. A. L. Johnson; Chairman of the Executive Committee: Mr. W. J. Terry.

London Transport Appointments

The following appointments have been announced by the London Transport Executive:—

Mr. C. E. Dunton, Technical Planning Officer, to be Civil Engineer.

Mr. K. Brinsmead, Permanent Way Engineer (Railways), to be Assistant Civil Engineer (Permanent Way).

Mr. H. Raine, Assistant to the Chief Engineer, to be Assistant Civil Engineer (General).

Scottish Region Appointments

The Scottish Region has announced the following appointments:—

Mr. F. R. L. Barnwell, Assistant District Engineer, Stratford, Eastern Region, to be District Engineer, Inverness, Scottish Region.

Mr. C. J. Lamb, District Motive Power Superintendent, Edge Hill, London Midland Region, to be District Motive Power Superintendent, Glasgow (North), Scottish Region.

Mr. J. McCrae, Assistant District Motive Power Superintendent, Ayr, to be Assistant District Motive Power Superintendent, Glasgow (North).

Mr. J. A. Arthur, Civil Engineer's Department, Scottish Region, to be Architect, Civil Engineer's Department, Scottish Region.

Mr. R. Young, Chief Clerk, Works Accountant's Office, Cowlairs, to be Works Accountant, Cowlairs.

The Antofagasta (Chili) & Bolivia Railway Co. Ltd.

Higher wages have resulted in higher tariffs: purchase of more locomotives and other rolling stock probable

The sixty-third annual general meeting of the Antofagasta (Chili) & Bolivia Railway Co. Ltd. was held in London on July 31, Mr. H. C. Drayton, Chairman, presiding.

Mr. Drayton, in his statement circulated with the report and accounts, said that in 1950 the net receipts from the operation of the railways and waterworks were £312,894 and showed a decrease of £130,760 compared with the previous year.

The balance to the credit of net revenue account at December 31, 1950, after adding other income, exchange differences, and so on, was £467,264, which it was proposed to carry forward. This compared with £480,176 brought forward. The appropriations included dividend of 7½ per cent., less income tax, on the 5 per cent. cumulative preference stock, bringing payment of arrears on this stock to December 31, 1941.

Goods traffic carried was 1,196,105 tons, as compared with 1,218,872 tons, although gross receipts, £3,832,890, were £293,755 more due to higher tariffs. The most important increases in goods traffic were in manufactured nitrate, gasoline, sulphur, and low-grade ores, while decreases were shown in copper bars, articles for the mining industry, general merchandise, coal, coke, and flour.

Passengers carried increased from 510,339 to 526,951 and receipts from £215,341 to £256,116. Working expenses were £3,519,996, and showed an increase of £424,515 over 1949, due almost entirely to the higher cost of salaries and wages, social laws contributions, operating materials, and oil fuel.

Stores shipments excluding fuel oil were valued at £465,191 or £258,891 more. Of the increase £251,897 represented the cost of six new Garratt locomotives shipped towards the end of the year. Receipts from the waterworks increased to £67,646 compared with £60,231 and expenses rose to £115,838 as compared with £101,744.

The loss on the working of the Aguas Blancas Railway was £6,266 compared with £7,926, due to an increase of some 3,000 tons in the total traffic in sulphide of soda. The loss on the Bolivia Railway Company increased from £181,253 to £184,429. The Antofagasta Railway received £202,120 from its series "B" bonds of the Bolivia Railway Company so that, deducting the operating loss of £184,429, net income was £17,691 as compared with £20,867 during 1949.

A sum of £78,261 was charged direct to working expenses on account of renewals, and in addition to this, £121,739 was appropriated from net revenue account, making a total provision for renewals of £200,000, the same as in 1949. The balance on renewals account at the end of 1950, after deducting charges less credits for the year, amounted to £1,657,160, compared with £1,714,995.

In Chile the legal minimum salary for employees was again increased in January, 1950, and in the same month the annual bonus, payable to employees of public utility companies, was also increased. This was followed in April by a petition from workmen to whom, after negotiations, higher wages and allowances were granted. To compensate the company for these concessions the Chilean Government authorised in July an increase of 33 per cent. in the tariffs of the Antofagasta and Aguas Blancas lines. Even this was insufficient to cover expenses and a further application was submitted in November for another increase. The application received sympathetic consideration and a further 23 per cent. increase in the basic tariffs was granted from February last.

In Bolivia the company was obliged to increase the salaries and wages of its currency-paid staff by 20 per cent., with effect from April 1, 1950, and as compensation the Government authorised a general tariff increase of 30 per cent. from April 8, 1950.

The cost of living rose sharply during 1950, and in February, 1951, together with other Bolivian railways, they were faced with a further 30 per cent. increase in salaries, wages, and social allowances, for which the Bolivian Government authorised a general increase in tariffs of 20 per cent.

Rolling Stock Requirements

Work on the new sulphide plant which the Chile Exploration Company is constructing at Chuquicamata was proceeding rapidly and it was expected that the first part would go into operation in December. When it did they would be called on to handle large quantities of limestone required for treatment of the copper ores by the new process. As this new plant developed, more fuel oil would be required, as well as limestone, and the tonnage of copper to be transported to the coast should also increase. To handle this additional traffic they would be compelled to purchase more locomotives and some other rolling stock.

Cattle traffic over the Salta Railway, which the Company operated for account of the Chilean Government, was on the whole satisfactory in 1950, although extensive damage was caused by an earthquake in December. The six new Garratt locomotives for Bolivia ordered in 1947 were delivered towards the end of 1950 and were now in service.

It had long been realised that sooner or later additional first class coaches would have to be purchased to meet requirements in Bolivia. It had now been decided to order three first class Pullman cars. With the increased traffic which they had been called on to handle in recent months, a considerable strain had been placed on their wagon stock, and it might be necessary to consider the purchase of additional wagons.

With the increase in mineral traffic from Bolivia it was expected that there would be considerable improvement in the tonnage of materials imported for the mining industry. During 1950 the Bolivian Government oil pipeline from Camini to Sucre and the Sucre oil refinery were brought into operation. As this industry developed it was to be expected that less oil would be imported into Bolivia although local traffic in those commodities should improve.

Towards the end of last year the Bolivian Government signed a contract for the construction of a road 550 km. in length between Cochabamba and Santa Cruz. It was too early yet to say what effect this road would have on railway traffic, although it was to be expected that imports of timber, sugar, and rice would be reduced when national supplies became available. In the meantime their up traffic should benefit from the import of construction material *via* Antofagasta.

The report was adopted.

British Electric Traction Co. Ltd.

Increased income from general investments: burden of higher wages and further tax on fuel

The fifty-fifth annual general meeting of the British Electric Traction Co. Ltd. was held on July 26 at Winchester House, Old Broad Street, London, E.C.2, Mr. H. C. Drayton, Chairman, presiding.

Mr. Drayton, during the course of his remarks, said that the consolidated profit of the group amounted to £2,062,230 for the year. Taxation absorbed £850,804 and that left a net group profit of £1,211,426 for the period under review. Deducting the proportion of profits attributable to the interests of minority shareholders in subsidiary companies, they were left with £1,085,748 which represented the proportion of the net group profit attributable to the company, which compared with £1,172,628 for the previous year.

The recommendations regarding dividends required £403,305, and provided in the case of the deferred ordinary and "A" deferred ordinary stocks for a final dividend of 17½ per cent., making a total distribution of 25 per cent. The dividends paid on these stocks for the previous year were in the aggregate equivalent to 22½ per cent. on the total amount of deferred stocks now in issue. Of the remaining balance, £682,443, there was retained in the accounts of the subsidiary companies and added to the revenue reserves and undistributed profits of those companies, £446,501. The remainder, £235,942, they proposed to add to the undivided profits account.

Their working profit was £504,480, which represented the consolidated working profit of subsidiary companies, including industrial companies such as Eddison Plant and some of the laundry companies, but only a small number of their bus undertakings. Revenue from associated companies was £1,494,220, derived in the main from dividends received from associated bus companies in which their interest was less than a controlling one, and from their holding in Broadcast Relay Service. The third item of consequence was the income from their general investments totalling £460,543. Although the working profit of the group showed a decline the income from general investments showed an increase of nearly £100,000 and might well show a further expansion this year.

Passenger Road Transport

Their interests in the passenger road transport field had been extended and the businesses of several comparatively small bus undertakings in South Wales had been acquired. Since the end of the financial year the Potteries Motor Traction Co. Ltd. had purchased a number of businesses operating in the Staffordshire area and there had been expansions in other districts. It was anticipated that these acquisitions would result in substantial operating economies and enable the group to provide improved facilities to the travelling public.

Reference had been made last year to the increase of 9d. per gal. in fuel tax imposed under the 1950 Budget. Since then the Government had seen fit to add to this penal burden; the tax had been further increased by 4½d. per gal. Thus by two strokes of the Whitehall pen some £2¼ million had, within a period of 13 months, been added to their annual fuel bill. This latest increase came on top of a wages award which would cost the group £1 million a year and, coupled with the constantly rising prices of practically every commodity the companies used, had meant that most of them had, for the first time for many years, had to seek general increases in stage carriage fares. This was a step which had been taken with profound regret, since it had been their proud boast that, despite the soaring costs with which they had had to contend, they had been able to maintain fares at practically the same levels as those which obtained 30 or more years ago. This position had been forced on them and was the direct outcome of discriminatory taxation.

Although they secured a substantial wages award as recently as December last the trade unions had just made another application for a further general increase. Should there be another increase it would mean immediate applications to the Licensing Authorities for further increases in fares. They could not absorb these additions to their costs and still maintain fares at existing levels as they had been able to do in the past.

Their general investments formed a useful spreading of interests and made a substantial contribution to their income. Some idea of the importance of these general investments could be obtained from the consolidated accounts; their book value was something over £6,700,000, while their real value exceeded £9,000,000.

Those who had followed the fortunes of the B.E.T. would know that the first objective of the company had been the introduction of electric traction for trams, either *de novo* or in substitution for horse or steam traction. The company had provided the money for laying down the tramways and also for their subsequent operation. There had followed the natural development of generating and supplying electricity to consumers other than tramways, which had led to the building up of a considerable number of electricity supply undertakings—now unfortunately nationalised. With the trend for the internal combustion engine to supersede the older form of power they had graduated from trams to buses, which process had been going on over the last 30 years. On August 4, a ceremony was being held to mark the final stage of the closing down of the group's last tramway system, that of the Gateshead undertaking, which, like others before it, had changed over to buses.

The report and accounts were adopted.

Demonstration for Pallet Standardisation

Loading and stability tests carried out at Stockton with railway wagons

For some time the British Standards Institution has had under consideration the formulation of standards for the design and construction of pallets for use in connection with fork-lift trucks and the pallet truck system of freight handling as applied to railway van loading and internal factory and warehouse movement. With a view to providing the B.S.I. sub-committee with data to assist in its work, a series of demonstrations was held recently at the Stockton-on-Tees depot of S.P.D. Limited, an associate of Lever Brothers & Unilever Limited.

Stability tests were first carried out, using Lansing Bagnall 2-ton electric trucks with 22 in. and 27 in. forks, and a 22 in. Matling 1-ton petrol engine truck. The demonstrations were carried out with a view to observing any defects during the handling of the more common sizes of pallets in the different types of pallet trucks. Square and rectangular pallets were carried during the demonstrations; the rectangular pallets were carried with narrow and broad surfaces across the forks. The loads consisted mainly of cartoned products, the weights of which

Fork truck loading an experimental wagon for carrying palletised loads

varied from 13½ cwt. to approximately 2 tons. The pallet dimensions were 32 in. × 40 in., 40 in. × 40 in., 40 in. × 48 in., and 40 in. × 60 in. The loads were taken over a timed course, which included a series of right-angle corners and a gangway 70 yds. long to afford an opportunity of observing the stability of the various sized pallets when turning corners.

Railway Wagon Loading

Included was a demonstration of the loading and unloading of a railway wagon. For this purpose a number of wagons were shunted alongside the loading platform of the warehouse; the wagons were partially loaded ready for the demonstration. Individual wagons were loaded with cartoned products, the pallets were 40 in. × 40 in., 32 in. × 40 in., and 40 in. × 48 in., and the tests were carried out with a view to ascertaining the manœuvability of the different fork trucks inside the wagon while loading or unloading the last few pallets.

Among the wagons used was a British Railways experimental pallet wagon fitted with modified roller operated doors, giving an opening 8 ft. 6 in. wide. Three such vans have so far been modified for use in conjunction with palletised traffic, and have been in service since November, 1950. They are used principally for the carriage of S.P.D. palletised traffic between Port Sunlight, London, and Stockton-on-Tees. Also available for inspection was an experimental wagon received from Port Sunlight. The palletised cartons had been spot-glued together to prevent the movement of the load during shunting.

Traffic Handling at the Highland Show

The annual show of the Royal Highland & Agricultural Society of Scotland was held in Aberdeen from June 19-22 and was the biggest Scottish agricultural show ever seen. Much attention was paid to the British Railways pavilion which dealt with numerous inquiries during the week.

More than 10,000 sleepers in 174 wagons were received at Aberdeen in the preparatory stages for use as vehicle tracks. There were two special trains of exhibits from Dorchester and a train with tractors from London. A total of 487 wagons arrived by freight train, including 270 with machinery, implements, and so on, together with 175 with containers and 42 with showyard materials; 220 head of livestock in 61 vehicles were also dealt with.

Return traffic was slowed down by the ground conditions. Towards the end of the show, indeed, the stockyard was almost impassable, and it was necessary to lay down a sleeper bay to which animals were walked for loading to road vehicles. Nevertheless, despite all the handicaps due to the bad weather, traffic was despatched in acordance with the programme. Six special trains were run to the south immediately after the show and through services were provided to Cambridge for traffic for the Royal Show. Three livestock specials left Aberdeen and one of these was for Inverness and stations in the far north of Scotland.

Thirty excursion trains took visitors to Aberdeen for the show. Thursday, June 21, was the peak day for this traffic, and specials from Berwick, Tain, Kelso, Alloa, Inverness, Hawick, Glasgow, Lockerbie, Edinburgh, and Dundee were handled at Aberdeen on that day.

MORGAN CRUCIBLE CO. LTD.—After providing £902,956, against £591,298, for tax, the net profit of the Morgan Crucible Co. Ltd. for the year ended March 31 was £614,020, compared with £543,748 in the previous year. Again the dividend recommended is 12½ per cent. and £142,705 is carried forward. General reserve receives £200,000 against £150,000.

British Axle Lathe for Canada

Built for the C.N.R. in record time

Early this year an order for a special 16 in. axle lathe for the Canadian National Railways was obtained by Tangyes Limited in competition with Canadian and American makers. After careful consideration a delivery time of five months was agreed as compared with a normal time of at least 12 months which would be required for a special machine of this size. Special features necessitated an almost complete redesign of the standard machine, together with many new patterns and a number of special machining fixtures, but the machine has been completed and tested with one week to spare.

The machine was specified to be of extra heavy-duty design for rough and finish turning journals and wheel seats of carriage and wagon axle forgings; also for finish turning and burnishing, both ends being in operation simultaneously. The following special features were called for:—

(1) Hardened steel wear strips fitted to all bed ways, together with bronze wear strips on the saddles.

(2) Oversize tailstocks with built-in anti-friction centres and loading supports.

(3) Tool turrets fitted with hardened and serrated bases in place of dowel location.

(4) All driving gears to be of heat treated alloy-steel precision finished.

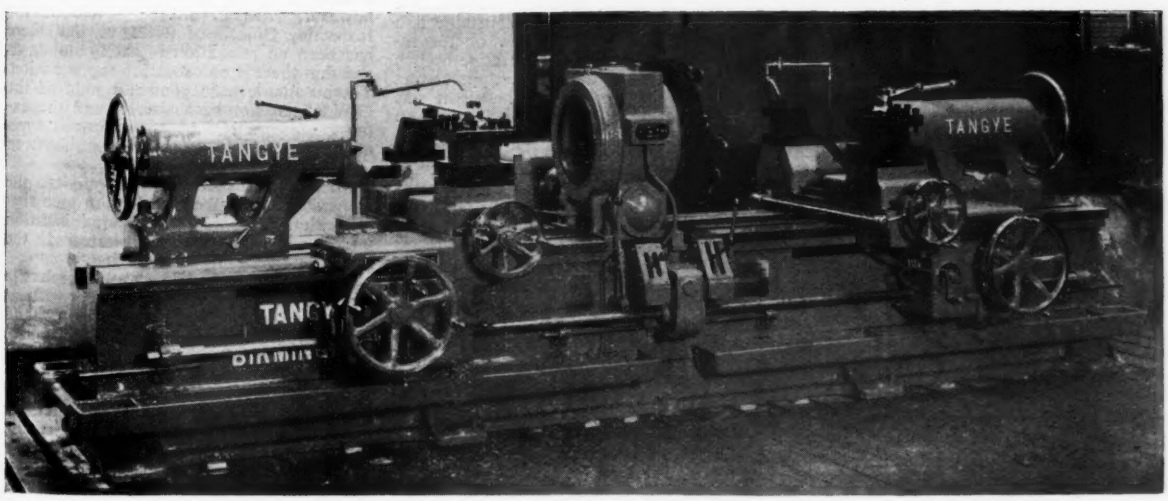
(5) Double opposed burnishing attachments with load equalising device.

(6) Fully centralised mechanical and electrical controls.

Special features were also required in the centre drive headstock as well as special rates of feed to suit C.N.R. machining practice. The principal dimensions and other particulars are as follow:—

Height of centres	16 in.
Swing over bed	30½ in.
Maximum distance between centres	8 ft. 6 in.
Length of bed	15 ft. 9 in.
Diameter of hole in spindle	13 in.
Number of feeds	4
Rate of feeds	1/16 in., 3/32 in., 1/8 in. and 7/32 in. per rev.
Number of spindle speeds	8
Range of spindle speeds	10-90 r.p.m.
Weight	11 tons

SCRAP PRICES FOR LEAD AND ZINC.—As a result of increases in the prices of virgin lead and zinc the Minister of Supply has made an Order increasing the maximum prices of the classes of non-ferrous scrap and secondary metal which contain these two metals. The Order also brings brass ingots and billets under price control for the first time. The Order, the Non Ferrous Metals Prices (No. 6) Order, Statutory Instrument 1951 No. 1318, came into force on July 23, and is on sale at H.M. Stationery Office, price 3d.



Axle lathe designed and built by Tangyes Limited for the Canadian National Railways in record time

Parliamentary Notes

British Transport Commission Bill

The Lords' amendments to the British Transport Commission Bill were considered by the House of Commons on July 23 and agreed to.

Shortage of Footplate Staff

Mr. Geoffrey Wilson (Truro—C.) on the motion for the adjournment of the House of Commons on July 20 raised the question of rail and road consignments from Par, Cornwall; these had been much affected in recent months by rail embargoes, of which he gave some details. This question of embargoes was a national problem. If they were due to shortage of railwaymen, he would draw attention particularly to the shortage of firemen, which he illustrated with statistics.

It seemed odd, continued Mr. Wilson, that whereas according to *The Railway Gazette* of February 3, 1939, the Conservative Government of the day directed that railway firemen should not be accepted as volunteers for the army at a time when we were at peace with Hitler, nowadays the Labour Government, which reserved miners, apparently still permitted firemen to be called up. They were not even put in the transportation service, but dispersed throughout the armed forces, and might never return to the railways at all.

Housing of Railwaymen

Housing, Mr. Wilson said, was another difficulty. Railwaymen were reluctant to accept transfers. The older and more experienced men with family responsibilities were reluctant to be transferred and promoted because of the difficulty of getting houses in areas where council houses were allocated on a points system and with residential qualifications. Consequently the best men were not getting the jobs. They were getting to the stage where the British transport system was not providing a properly integrated service.

Mr. Alfred Barnes, Minister of Transport, replying, said housing was an essential part of the difficulties facing British Railways. They owned something like 52,000 houses, inherited from the four main-line companies. Over 21,000 of them were now controlled properties, and many others had passed, in the course of time, to widows or retired railway employees. With the grave housing shortage, public feelings were aroused if the Railway Executive tried to get possession of these properties which were originally built for staff. He did not see how, with the present shortage of materials and labour and the need to control investments, they could allow inidividual industries to undertake building programmes.

Traffic embargoes, said Mr. Barnes, had been much graver in the last two or three months, but were nothing new. Long before nationalisation, there was, from time to time, under the old system the necessity for embargoes. He could give no assurance that we should not meet these difficulties in the forthcoming winter. Younger men, including many firemen, were being attracted away from the railways to work with shorter working weeks and higher pay. This was being discussed.

Deferment of Railwaymen

On the question of deferment ,the Government was considering where this should be made. It was a very serious thing to commence deferment of one section of an industry and then another. If this shortage continued drastic steps would have to be taken, because in the last resort they could not carry out an effective defence programme or maintain the export drive if the railways ceased to run.

British Employees of Argentine Railways

Mr. George Deer (Newark—Lab.) on July 27 asked the Secretary of State for Foreign Affairs for information on pensions from the Argentine Government to former British railway employees.

Mr. Ernest Davies (Parliamentary Under Secretary of State for Foreign Affairs) read the text of a letter addressed on April 23 to the Economic Secretary to the Treasury on the part of the Argentine Government. H.M. Ambassador at Buenos Aires, he said, has since maintained close contact with the competent Argentine authorities with a view to an early solution of the remaining administrative difficulties.

Action by Argentine Government

The letter states that the Argentine Government has resolved:

(*a*) To consider favourably the periodic renewal of permits to continue residing in the United Kingdom of railway pensioners and the widows of pensioners (who are British subjects) of the former British railway companies at present resident in the United Kingdom, as well as applications at present under consideration;

(*b*) To consider favourably applications made as from the present date by railway pensioners and the widows of pensioners (British subjects) of the former British railway companies who are at present resident in Argentina. and express the intention of settling in the United Kingdom;

(*c*) To issue authorisations of an exceptional character for the remittance of railway pensions up to the equivalent of 1,000 pesos a month. These authorisations will also include remittances due to pensioners which, owing to the expiry of the latter's permits to reside in the United Kingdom, it has not been possible to make;

(*d*) To consider as from the present date individually, remittances in those cases where the amount of pension is in excess of 1,000 pesos a month. The British Embassy in Buenos Aires will submit to the Central Bank of the Argentine Republic with 60 days of the present date a list of the persons referred to above so far as known to them.

Railways to Strategic Ports

Lord Teynham in the House of Lords on June 26 asked whether the strategic importance of the port of Whitstable had been fully considered in view of the report that the Canterbury-Whitstable branch was to be closed; and while appreciating the interests of economy, whether it was Government policy to close branch lines to similar ports. It was essential that railways to small ports be kept in a state of efficiency for emergencies. He asked the Government what steps would be taken to maintain Whitstable in operation, and suggested that it was not a practical possibility to handle port goods at the main (Kent Coast) line station. The scheme therefore to extend sidings at the latter was wasteful; a little more money spent on improving the harbour would be far more beneficial and would keep the port in operation and in a state of efficiency. Closing the Canterbury-Whitstable branch, which served the harbour, would mean eventual decay of the port.

Lord Lucas of Chilworth (Parliamentary Secretary to the Ministry of Transport) said that the passenger service on the branch had been discontinued for lack of traffic, and there was a very efficient bus service. Goods traffic only justified one train each way per day, and could be better carried, and carried more economically in the long run, by the Road Haulage Executive.

Lord Teynham said that if the port were improved, traffic would increase and railway receipts would go up.

Lord Lucas said that whenever the B.T.C. closed a line on the ground of economy, it instantly became in the eyes of many, the most important line in the country. When such changes were proposed, the Minister of Transport was informed, and if necessary the Service Departments were consulted. As the Canterbury-Whitstable branch was uneconomic, it was proposed to close it, and the B.T.C. intended to adhere to its decision.

Questions in Parliament

Minister of Transport and B.T.C.

Mr. D. Donnelly (Pembroke—Lab.) on July 2 asked the Minister of Transport how many times he had met the B.T.C. since it was set up; and whether he had made arrangements for meeting it at regular intervals.

Mr. Alfred Barnes: I have no precise account of the many times I have met the Commission or its Members, but I do so whenever I judge it necessary, and at regular intervals.

Mr. Donnelly: There is considerable support on this side of the House for more energetic Ministerial action to create greater decentralisation in this matter, and for seeing that the people who have mismanaged this industry in the past should not continue to do so.

Mr. Barnes: Mr. Donnelly must not assume that the process of decentralisation is not going on. It is, and very considerably.

Western Region Safety Devices

Mr. G. Nabarro (Kidderminster—C.) on July 2 asked the Minister of Transport if he was aware of the concern of the travelling public at the decline in safety standards in the Western Region since nationalisation, due to the modification of the G.W.R. automatic signalling and train control; and if he would make a statement.

Mr. Alfred Barnes: I have seen references in the press to local representations by Western Region footplate staff who object to certain recent changes. I am, however, satisfied, on the advice of the Inspecting Officers of Railways, that there has been no relaxation of safety standards and that there is no cause for apprehension. The automatic train control system of the G.W.R. has not been altered, and the extension of A.T.C. of an improved type, now under large scale experiment, has been accepted.

Mr. Nabarro then drew attention to the allegation by the Western Region men that "Reckless and inefficient administration under nationalisation has impaired the efficiency of the Western Region."

Mr. Barnes replied: I should emphasise that the inspecting staff of my Department is entirely responsible to the Ministry, and in no way subject to Railway Executive or Transport Commission influence or directions.

Mr. Geoffrey Wilson (Truro—C.): Some Western Region drivers contend that the higher accident rate on the L.M.S. than on the G.W.R. pre-war was due to the rule regarding speed restrictions on that railway, which has now become standard for all railways.

Mr. Barnes: I am not aware of that.

Mr. George Thomas (West Cardiff—Lab.): Has the Minister received any official representations on this matter from the union concerned?

Mr. Barnes: I could not say offhand, but I do know that this is the subject of more or less continuous examination by the unions and the railway managements. Also, my own inspecting officers examine every proposed change. They are an independent technical body and contribute to the discussions. Insofar as inquiry is more or less continuous, I do not like to give a direct negative.

Viscount Hinchingbrooke (South Dorset—C.) asked the Speaker whether he would be good enough to take note of this question as being the useful prototype of the kind of questions which the Minister had refused in the past, but which they were all delighted to see on the order paper.

Mr. Barnes said that this question affected the railway inspectorate Department of his Ministry and, therefore, raised a different issue from matters of management by the B.T.C.

Eastern Area Passenger Transport Scheme

Mr. W. T. Aitken (Bury St. Edmunds—C.) on July 9 asked the Minister of Transport if the B.T.C. had yet submitted the Road Passenger Transport Scheme for the Eastern Area; and if, in view of the anxiety felt by local interests regarding their future relationship with the new authority or board, he would give an assurance that, in addition to county councils and county borough councils, urban and rural district councils and other interests involved, would be given an opportunity of expressing their views before the scheme was promulgated.

Mr. Alfred Barnes: The answer to the first part of the question is no. Before a scheme is submitted to me the B.T.C. must consult the county and county borough councils in the area, and the bodies and persons providing passenger transport services likely to be affected. Before making an Order embodying a scheme, I am required by the Act to give to anyone who wishes to object the opportunity to do so, and to hold a public inquiry unless all objections are withdrawn.

Mr. Aitken said that the apprehension was due mainly to the publication of the Northern Area Scheme, which showed a good deal of lack of understanding of the needs of rural communities.

Mr. Barnes: There is no need for this apprehension, because the Act provides for local opinion to express itself very fully at every stage.

Fires in Trains

Lord Clydesmuir in the House of Lords on July 17 asked regarding the fire in an express near Huntingdon on July 14, whether the recommendations of the report on the Beattock fire in June, 1950, were being acted on.

Lord Lucas of Chilworth (Parliamentary Secretary to the Ministry of Transport) recounted the events and added: The cause has not yet been established. An Inspecting Officer of Railways has already visited the site and examined the burnt-out coaches; he will open his formal inquiry on July 20. Until his investigations are complete and report published it would not be right for me to make any further statement.

The recommendations contained in the report on the fire at Beattock Summit on June 8, 1950, have, with three exceptions, been accepted by the Railway Executive, and in so far as time has permitted, are in process of implementation. The three exceptions are: first, that, in the construction of new sleeping cars, an intermediate external door should be provided in the centre of the coach on the corridor side; secondly, that in the new open (centre-corridor) coaches, external doors should be fitted in the centre on both sides, in addition to the doors already provided; thirdly, that a standard fire-fighting procedure should be introduced for adoption in the event of a train catching fire, so that each member of the train crew and dining car staff would know exactly what he should do. These three points are still under discussion between the Inspecting Officers of Railways and the Railway Executive.

Automatic Doors on Underground

Lord Barnby in the House of Lords on July 24 asked, in view of the danger from trains travelling between Westminster and the City with open doors, when the completion of a programme of automatic doors might be expected.

Lord Lucas of Chilworth (Parliamentary Secretary to the Ministry of Transport) said that at present no trains fitted with hand-worked doors normally run on weekdays between Westminster and the City. When there is a temporary shortage of rolling stock, or congestion, it is sometimes necessary to work a few such trains, also on Sundays. As new rolling stock is delivered, the necessity for running trains with hand-worked doors on the District main line will become less, and should cease early in 1952.

Staff & Labour Matters

Railway Wage Claims

Claims for an increase of 10 per cent. in existing rates of pay have been lodged this week with the Railway Executive by the three railway trade unions, the N.U.R., A.S.L.E.F., and T.S.S.A., and also by the Railway Workshop Supervisory Staffs Joint Negotiating Committee, acting on behalf of workshop supervisory grades. In addition, the application from the A.S.L.E.F. seeks that all time worked between 12 noon and midnight on Saturdays shall be paid for at the rate of time-and-a-half, and that double time shall be paid for Sunday work and turns commencing on Sundays and extending into Monday.

The reasons for the claims are said to be the increase in the cost of living which has taken place since the last wages settlement operative from January 1, 1951, and of the comparatively better rates of pay in outside industry.

Higher Pay for Busmen

Wage increases recently offered by municipally owned passenger road transport undertakings have been accepted by delegates representing some 60,000 bus and tramcar drivers, conductors, and maintenance staff. The offer had been put before the National Joint Industrial Council for the road transport industry.

The new minimum rate for drivers will be £6 3s. rising to £6 6s. Conductors will get £5 18s. rising to £6 1s. For inside men, including first-grade maintenance men, the new rate will be £6 2s. Women employed as substitutes for men will now get equal pay for the job, as against 90 per cent. of the male rates for the first six months as hitherto.

A claim for increases in pay for employees in the company-owned undertakings was considered at a meeting of the Joint Industrial Council on July 19.

A similar application has already been lodged on behalf of London Transport bus and tram staff.

Road Haulage Wage Increases

Leaders of five unions, the Electrical Trades Union, the Amalgamated Engineering Union, the National Union of Vehicle Builders, the Transport & General Workers' Union, and the National Union of General & Municipal Workers, decided last week to submit claims to the Road Haulage Executive for substantial wage increases for 10,000 maintenance men in the nationalised transport industry.

The present rate for skilled craftsmen in London is 3s. 0½d. and in the provinces it is 2s. 11d. It is understood that an increase of 3d. an hour is to be the aim, which, based on a 44-hr. week, would be 11s. a week.

Contracts & Tenders

The order for 25,000 16-ton mineral wagons placed with the Pressed Steel Co. Ltd. by the Railway Executive has been increased to 50,000 and spread over a period of five years.

The order for 1,000 four-wheel low-side wagons of "FJS" type, which, as recorded in our May 18 issue, was placed with Metropolitan-Cammell Carriage & Wagon Co. Ltd. by the Queensland Government Railways, has recently been increased to 3,000 wagons of the same type.

Beyer, Peacock & Co. Ltd. has received an order for ten Beyer-Garratt locomotives for the South Australian Government Railways, 3-ft. 6-in. gauge section. The locomotives will be based on the standard light type Beyer-Garratt locomotive and will have the 4-8-2 + 2-8-4 wheel arrangement and a tractive effort of 43,520 lb.; they are for use on the Broken Hill-Port Pirie section.

The Crown Agents for the Colonies have recently placed a contract with the North British Locomotive Co. Ltd. for seven additional "River" class 2-8-2 locomotives. Delivery of the locomotives, which are for the Nigerian Railway, is to be early next year.

The Crown Agents for the Colonies have recently placed the following contracts for the East African Railways & Harbours.—

Metropolitan-Cammell Carriage & Wagon Co. Ltd.: 16 first class coaches for Kenya & Uganda section; ten first class coaches for Tanganyika section.

The Railway Executive has placed a contract with Cravens Railway Carriage & Wagon Co. Ltd. for 1,000 four-ton steel containers of a new type for conveying ground limestone, dolomite, fluorspar, alumina, cement and similar substances. The new design is the result of experiments made with a prototype. The container is in the form of a lidded box divided into two equal compartments which can be discharged simultaneously, or separately, through bottom doors; these doors open by gravity on release of a catch. The lid is designed to operate with the minimum of headroom when open. Opening and closing mechanism of lid and bottom doors is simple to operate. The container is waterproof and is provided with cleats on the sides so that sheets may be fixed during unloading to keep down dust.

Metropolitan-Cammell-Weymann Motor Bodies Limited has received an order from the State of Cordoba, Argentina, for 150 Olympic transit type 40-seater buses.

A contract for supplying all the airfield lighting and numerous other items of electrical equipment required by the South African Railways for installation at the new Jan Smuts Airport, Johannesburg, has been placed with the General Electric Co. Ltd.

The 25 bogie tank wagons which, as recorded in our July 13 issue, have been ordered from Hurst, Nelson & Co. Ltd. by the Sudan Government, will be for carrying benzine and will be of 20 tons capacity.

The Nizam's State Railway has placed an order with Guy Motors Limited for 60 Otter diesel passenger chassis for its road transport section.

The Danish State Railways have placed a contract with A.C.V. Sales Limited for 16 Regal Mark III chassis with 7·7 litre engines. The chassis are for buses for the Road Transport Section.

Notes and News

Change of Address.—With effect from August 7, the Stahlunion Co. Ltd., is moving to new premises at 61, Pall Mall, London, S.W.1.

Vacancy for a District Mechanical Engineer.— A district mechanical engineer not over 40 years of age, is required by the Iraqi State Railways, for one tour of three years in the first instance. See Official Notices on page 139.

British Railways Tug Sunk.—The British Railways tug *Earl*, one of four escorting the Festival of Britain ship *Campania* into Queen Alexandra Dock, Cardiff, on July 29 suddenly capsized and sank. The master and the crew of five dived into the water as the vessel went down and were rescued by small boats.

British Railways Coal and Steel Carryings.—During the week-end to July 30, British Railways cleared 200,830 tons of coal from deep-mined pits and open-cast sites, making a total of 2,865,570 tons for the week. The latest figures for iron and steel show that 151,826 tons were conveyed during the week ended July 21 from the principal steelworks.

Bank Holiday Train Services.—Plans for August Bank Holiday travel announced by the Western Region include the running of over 170 special main-line trains during the period Friday, August 3, to Tuesday, August 7. It is anticipated that passenger traffic to the West of England and Wales will be heavy and on August 4 nearly 100 long-distance trains will leave Paddington. During the holiday period the advertised sailings will operate between Weymouth and the Channel Islands, and between Fishguard Harbour and Southern Ireland. To convey the 400,000 passengers expected to travel South from London to the Kent and Sussex Coasts, the Hampshire Resorts, Isle of Wight and the West of England, during the weekend, the Southern Region's intensive Summer train service will be further strengthened by the addition of some 400 extra main-line trains. Eighty boat trains will run from London to the Channel Ports for the 40,000 holidaymakers travelling to the Continent and Channel Islands. In the North Eastern Region between August 3 and 10, 289 reliefs and 149 excursion trains will be run.

Rail and Road Office Opened at Glasgow.—The Scottish Region of British Railways, in conjunction with British Road Services, has opened a joint office at 65, Ingram Street, Glasgow. The office is the first of its kind in Scotland and is staffed jointly by the two interests. It is open during market hours and is proving a great convenience to traders in the Glasgow Fruit Market.

Trespassing on Line: Railway Executive Appeal Allowed.—The Court of Appeal last week allowed an appeal by the Railway Executive against an award of £6,000 damages to a boy who, aged nine, got through a fence dividing a recreation ground from the electrified railway, and ran across to retrieve a ball. He tripped, and while he lay between the live rail and the running rail his arm was cut off by a train. The action had been tried with a jury, who found that the boy was on the line with the Executive's "tacit permission" or licence. The Court of Appeal ruled that there was no evidence that the railway officials knew that children habitually trespassed on the railway and therefore could not be said to have "licensed" the use of it. The boy was a trespasser. It was clear he knew it was naughty and dangerous to go on to the railway. There was no evidence that the driver saw him; he said his eye was on the signal. He owed no duty to a trespasser of whose presence he was unaware, and was not therefore guilty of negligence. Leave to appeal to the House of Lords was granted.

Associated Electrical Industries Limited.—At recent meetings of the stockholders of Associated Electrical Industries Limited all the resolutions in connection with the proposed conversion of 8 per cent. preference stock into 4½ per cent. preference stock and the issue of further ordinary and 4½ per cent. preference shares were carried unanimously. Under the plan concerned the capital of the company is to be increased from £8.696,050 to £10,000.000.

Current Failure at Victoria, London.—As a result of a cable fire on Grosvenor Bridge, between Victoria Station, London, and Factory Junction, Southern Region, on Saturday, July 28, there was a signal and track circuit current failure at 1.26 p.m., following temporary repairs, current was restored at 3.02 p.m. Many trains were cancelled and there was heavy delay to all services on the Eastern and Central Sections operating from Victoria for the remainder of the day.

New Diesel Train in Ulster.—The prototype of a new diesel train built by the Ulster Transport Authority was taken on a trial run between Belfast and Larne on July 23 and after further experiments it will operate on the County Down line. The train, which consists of three coaches, is the result of 18 months of work in which existing railway coaches were converted into railcars. The train is capable

Railway Publicity in Ireland

An original window display in Dublin arranged by Coras Iompair Eireann to show the comforts of modern railway trains. Sections of a coach have been built into the window and models play the part of passengers

OFFICIAL NOTICES

GOVERNMENT OF IRAQ

DISTRICT MECHANICAL ENGINEER required by the Iraqi State Railways for one tour of 3 years in the first instance. Salary Iraq Dinars 1,560 a year (I.D. 1 equals £1). High cost-of-living allowance between I.D. 120 and I.D. 168 a year, according to dependents. Free passages. Liberal leave on full salary. Candidates, not over 40 years of age, should have served an apprenticeship in a locomotive workshop on the construction or repair of steam locomotives, and have had some 10 years subsequent practical experience in locomotive running sheds on the operation and maintenance of locomotives. They should hold a recognised degree in Mechanical Engineering and/or be Corporate Members of the Institution of Mechanical Engineers. Apply at once by letter, stating age, full names in block letters and full particulars of qualifications and experience and mentioning this paper to the CROWN AGENTS FOR THE COLONIES, 4, Millbank, London, S.W.1, quoting M 28765.B on both letter and envelope. The Crown Agents cannot undertake to acknowledge all applications and will communicate only with applicants selected for further consideration.

WE buy used or unserviceable Steel Files at good prices, in lots of 2 cwts. or more.—THOS. W. WARD LIMITED, R.S. Department, Albion Works, Sheffield.

APPLICATIONS are invited from suitably qualified men to fill the position of Process Planning Engineer with a large engineering firm engaged on the manufacture of Diesel Electric Locomotives. Men who have had process planning experience of other types of locomotives are also invited to apply. Please write giving full details of experience and salary required to Box 169, *The Railway Gazette*, 33, Tothill Street, London, S.W.1.

LONDON TRANSPORT EXECUTIVE invite applications for the post of Supplies Officer Initially the occupant of the post will be responsible to the Chief Supplies Officer for all work in connection with the requisitioning, receipt, custody and issue of stores stocks with an annual turnover of about £5 million, embracing material for the maintenance of railway and road service rolling stock, electrical plant, signalling, and permanent way, as well as building materials and common stock items. Candidates must have had a wide practical experience of storekeeping and of the forward planning of supplies in relation to engineering workshops, and they will be expected to be familiar with modern developments of stores layouts and storekeeping practice and accountancy. A knowledge of purchasing methods will also be required. The salary for the post will depend on the experience and qualifications of the successful candidates and will be of the order of £1,750 per annum. The successful candidate will be required to pass a medical examination and on completion of a satisfactory probationary period will be required to join a contributory superannuation fund. Applications, giving full particulars of age, experience, qualifications, and present salary should be sent within fourteen days of the appearance of this advertisement, to the CHIEF STAFF AND WELFARE OFFICER (F/V. 09), LONDON TRANSPORT EXECUTIVE, 55, Broadway, Westminster, S.W.1.

WANTED, young man with Railway Locomotive experience, for training for post in the offices of DAVIES & METCALFE LIMITED, Injector Works, Romiley, near Stockport.

BOUND VOLUMES.—We can arrange for readers' copies to be bound in full cloth at a charge of 25s. per volume, post free. Send your copies to the SUBSCRIPTION DEPARTMENT, Tothill Press Limited, 33, Tothill Street, London, S.W.1.

LOCOMOTIVE MANUFACTURERS' ASSOCIATION OF GREAT BRITAIN.—Applications are invited for the post of Secretary of the Association or, alternatively, Assistant to the Director with possibility of appointment as Secretary. The gentleman appointed would be required to be of good education, of distinctive personality, and possessing qualifications and experience enabling him under the Director to conduct the affairs of an old-established Association in an industry with home and world-wide connections. The selected candidate must be prepared for arduous personal duties and he would be required to pass a medical examination before appointment; and subsequently to enter the existing contributory Pension Scheme.—Apply in writing, stating age (not over 35), qualifications, together with full particulars of experience, and salary expected, to the DIRECTOR, LOCOMOTIVE MANUFACTURERS' ASSOCIATION, 82, Victoria Street, S.W.1, under cover marked "Personal."

GENTLEMAN, Oxford Degree Maths., returning to England, family reasons, at present employed by Dominion Railway as Technical Assistant in Chief Civil Engineer's Office, seeks position. Experience in drawing office and with Hallade, Proksima, etc. Present salary £600, but interesting and varied work first consideration. Correspondence in *R.G.* Age 38. —Box 154, *The Railway Gazette*, 33, Tothill Street, London, S.W.1.

TRANSPORT ADMINISTRATION IN TROPICAL DEPENDENCIES. By George V. O. Bulkeley, C.B.E., M.I.Mech.E. With chapters on Finance. Accounting and Statistical Method. In collaboration with Ernest J. Smith, F.C.I.S., formerly Chief Accountant, Nigerian Government Railway. 190 pages Medium 8vo. Full cloth. Price 20s. By post 20s. 6d. *The Railway Gazette*, 33, Tothill Street, London, S.W.1.

of a speed of 75 m.p.h. Engineers of the U.T.A. are very satisfied with its performance and it is expected that it may prove a success in operation. The technical staff is at present engaged in designing a six-coach train with a total of 1,000 h.p. Mr. J. S. Rogers, Chairman of the Transport Authority, was present on the trial run.

Special Steamers for Boy Scouts Jamboree.—British Railways provided special steamers between Newhaven and Dieppe on July 30 and 31 and August 1 for British boy scouts travelling to the seventh World Boy Scouts Jamboree in Austria. Over a thousand scouts travelled from Scotland and a special train for Newhaven left Edinburgh Waverley at 7.50 p.m. on July 29 via Newcastle and York. Another special started from Glasgow Central at 9 p.m. on July 30 and ran via Carlisle and Crewe.

Steel Allocation Schemes.—The Minister of Supply has made an Order calling for returns of iron and steel consumed during the first half of 1951, together with corresponding stocks, and estimated requirements for the following nine months. The object is to collect information on which the allocation of steel can be based. Schemes will be introduced as soon as possible for alloy steel and for all other steel, including sheetsteel and tinplate, which are already allocated. Copies of the Order, the Iron & Steel Utilisation (Information) Order, 1951, are on sale at H.M. Stationery Office.

Railway Models at Model Engineer Exhibition.—One of the principal features of the 1951 Model Engineer Exhibition, which is to be held at the New Royal Horticultural Hall, London, S.W.1, from August 22 to September 1, will be an "00" gauge model railway layout. The layout has been designed and constructed by the Ilford Model Railway Club and two operators will be required at each station, one for controlling main-line services and the other for handling yard and locomotive working. Railway models which have entered in the competition section again show the wide variety of interest of model engineers. There are, for example, models of an 0-2-2 locomotive, *Rainhill*, by LBSC, with its boiler tested to 200 lb.; a 4-4-0 American locomotive of 1875; and a G.W.R. "King" class locomotive, *King James I*, which took 9,000 hr. to build and is valued at £500. Among other exhibits, a working model signal-cabin and signals for one station, up and down road and branch line, with Sykes type lock and block instruments and repeaters will be shown, and there will be the usual variety of trade stands.

Railway Benevolent Institution.—At a meeting on July 25 the board of the Railway Benevolent Institution granted annuities to 14 widows and 16 members involving an additional liability of £440 a year; 63 gratuities were also granted amounting to £711 12s. to meet cases of immediate necessity. Grants made from the casualty fund in June were £608 16s.

Eastern Region Travelling Sales Service.—The Eastern Region of British Railways has reintroduced this year its travelling sales service for holiday runabout tickets in the Norwich district. A salesgirl travels on trains to East Anglian coast resorts, enabling the tickets to be purchased at leisure during the journey, and the tickets provide unlimited travel within specified areas.

Bolivar and La Guaira & Caracas Railway Companies.—The boards of the Bolivar Railway Company and the La Guaira & Caracas Railway Company announce that the second and final instalment of the purchase price for their undertakings has been received on the due date. It is considered that the eventual payments for the Bolivar "C" debenture stock and the La Guaira & Caracas ordinary stock will compare favourably with forecasts already issued. The boards accordingly advise holders of these stocks not to dispose of their holdings.

New Third Class Sleeping Cars for British Railways.—British Railways are now building 21 third class sleeping cars of new design. They will have two berths in each compartment instead of the four as now, and full bedding instead of rugs and pillows. The new cars will be of two different types; one will have eleven compartments and an attendants' section, and the other 12 compartments. Each compartment will contain an upper and a lower sleeping berth fitted with sprung mattress, complete with pillows, blankets, and sheets; the upper berth will be reached by a short step-ladder. Individual lighting will be provided for each berth and there will be ample headroom and luggage accommodation. A washbasin with hot and cold water will be fitted in each compartment. There will also be two toilets in each coach. Fifteen are being built at Derby and six at Doncaster. The new stock is expected to be placed in service between London and the North of England and Scotland in the autumn.

Four Thousand Years of Service.—More than 4,000 years of service were represented at a Coventry meeting of employers of the Dunlop Rim & Wheel Co. Ltd. Mr. J. Wright, General Manager, presented 59 gold badges to employees with 25 years of service and 151 silver badges for 15 years of service. There are now 844 employees with more than ten years of service.

European Transport Pool.—The Consultative Assembly of the Council of Europe is to discuss creation of a European transport pool. The Economic Committee, after meeting recently in Paris, agreed to set up a European Transport Office to examine the possibilities of pooling transport on the lines of the Schuman Plan for coal and steel. The Consultative Assembly will probably meet in Strasbourg in October.

Tour of London Junctions.—Following two successful London Junction tours in the South London Area in 1950 and one in East London in April, this year the Stephenson Locomotive Society is organising a tour north of the Thames, in which various portions of the line closed to, or never open for, passenger traffic will be covered. The start from Kensington Olympia will be at approximately 2.30 p.m. on Saturday October 6 and the route will be: Kensington Olympia—Willesden Junction

High Level—Dalston Junction avoiding line—Channelsea Junction—Temple Mills—South Tottenham—Carlton Road Junction—Cricklewood—Acton Wells Junction—Hounslow East Curve—Clapham Junction—Kensington Olympia. Tickets, price 6s. and the exact timings of the train will be obtainable in mid-September on application, enclosing a stamped addressed envelope, to: Stephenson Locomotive Society, 4, Temple Fortune Court, London, N.W.11.

Scottish Region Booking Office at Anchor Mills, Paisley.—With the co-operation of the management of the Anchor Mills, Paisley, the Scottish Region of British Railways has recently been operating a temporary booking and enquiry office in the dining room at the Mills. The office, which has been staffed from noon until 2.30 p.m. each day by a booking clerk from Gilmour Street Station, has been opened in connection with the Paisley Fair Holidays on August 4.

Increase in Capital.—The directors of the Cleveland Bridge & Engineering Co. Ltd. are proposing to create 200,000 5½ per cent. cumulative preference £1 shares and to offer them to existing preference and ordinary shareholders. The new capital is required for financing the increasing number of contracts which have been, or which it is anticipated will be, awarded to the company for constructional works in this country and other parts of the world. The proceeds of the issue would be applied to the reduction of an overdraft, now in excess of £400,000.

United Railways of Havana Nationalisation.—Cuba has appointed commissioners to meet British representatives to discuss the proposed nationalisation of the British-owned United Railways of the Havana & Regla Warehouses. The action followed a British note, referred to in our July 20 issue, which asked that representatives of both nations should discuss nationalisation problems. The British representatives will be the Ambassador in Havana, and Mr. Ernest Myatt, general manager of the railway, who for the past two years, since the Cuban Government intervened in the railway's affairs, has not had access to its offices or books.

Efforts to Avert Indian Railway Strike.—The All-India Railwaymen's Federation has announced that it will open talks with the Indian Government which may avert the strike scheduled for August 27. The decision was taken at a meeting of the federation executive, which represents 300,000 railway workers, after a personal appeal from the Prime Minister, Mr. Nehru, to call off the strike. The International Transport Workers' Federation is acting on behalf of the Railwaymen's Federation which is proposing to strike for higher wages. According to the General Secretary of the Railwaymen's Federation, the I.T.W.F. has appealed to the Indian Government and to Mr. Nehru to withdraw the ordinance which will make the proposed strike illegal, and to concede the demand for adjudication.

Forthcoming Meetings

August 6 (*Mon.*).—Irish Railway Record Society, visit to Athlone, Coras Iompair Eireann.

August 18 (*Sat.*).—Permanent Way Institution, London Section, visit to Barclay Perkins & Co. Ltd. Southwark Brewery. Party will assemble at London Bridge Station at 1.30 p.m.

Railway Stock Market

Stock markets have been confused by the implications and anomalies of the dividend limitation plan, which by restricting dividends to not more than the average of payments made in the two last accounting periods was more drastic than expected. There has been a big downward adjustment in industrial share values to conform to the new dividend basis, although on the other hand this has not been accompanied by exceptionally heavy selling, because there appears to be a growing assumption that the Gaitskell plan may never become law in view of General Election prospects. Should there be no election this year, it is difficult to see how the proposals could be put on the statute book without drastic amendment. New companies cannot pay more than 7 per cent., despite the fact that shares may have been issued on the basis of prospectus forecasts well in excess of this rate, while companies which have been out of the dividend list for the two last periods cannot resume payments with more than 5 per cent.

In contrast with the fall in industrial shares, which was followed by steadier conditions, British Funds have strengthened and there have been small price gains in debentures and preference shares which are of course not affected by the dividend scheme. Now that dividend limitation will make it difficult to issue ordinary shares on attractive terms industry will apparently have to raise new capital mainly in the form of debentures and preference shares. One effect of the dividend "freeze" has been to attract increased attention to overseas securities of all kinds and among these foreign rail stocks were more active. There was good demand for Antofagasta preference on wider recognition of the merits of this stock to which reference has been made on previous occasions. The price rose sharply to 66 and the ordinary stock also improved to 11. United of Havana securities have been firmer on the view that if nationalisation terms are at all reasonable, the various stocks should be worth more than their current market prices, which have been depressed for a long time by uncertainty as to the intentions of the Cuban Government. The 1906 debentures have strengthened to 19. Following the official statement that payouts are likely to exceed estimates, and advising holders not to sell, La Guaira ordinary stock has been firm at 89½, and Bolivar "C" debentures at 70.

Canadian Pacifics remained prominent up to 59 because of the strength of dollar stocks, higher dividend hopes, and also in view of Canadian oil developments. The White Pass Yukon scheme put the income debentures better at 92 and the 5 per cent. mortgage debentures were dealt in up to 207½. In other directions Paraguay Central "A" debentures marked 23, Guayaquil & Quito first debentures 29, and Chilean Northern first debentures 39. Brazil Rail gold bonds firmed up to 6 and San Paulo 10s. units were 14s. 6d. Leopoldina securities have been firm, with the ordinary at 10¼, the 5½ per cent. preference 26½, the 4 per cent. debentures 95½, and the 6½ per cent. debentures 141. Leopoldina Terminal 5 per cent. debentures were 93½ and the ordinary units 1s. 3d. Manila "A" debentures were 76 with the preference shares better at 7s. 9d. Nitrate Rails changed hands around 22s. and Taltal were 17s. 6d.

There was little business in road transport shares which in general are unaffected by the dividend limitation plan. In fact, because in some cases dividends have been reduced this year, there may therefore be prospects of higher payments next year, if profits improve, though this seems unlikely in view of rising costs. Southdown were 97s. 6d., West Riding 49s. 6d. and Lancashire Transport 60s. 6d. B.E.T. stock came back to 495, because if the Gaitskell dividend plan goes through, the company will apparently have to reduce its dividend.

Engineering and kindred shares were hit by the Gaitskell plan and those which had been strong recently on higher dividend hopes reacted sharply. T. W. Ward, for instance, came back to 70s., Guest Keen to 58s. 9d., and Thornycroft to 105s. while Vickers were down to 47s. 9d., Commell Laird 5s. shares to 13s., and Clarke Chapman to 62s. Babcock & Wilcox receded to 75s.

Locomotive building and engineering shares also came back because of the prospect of lower dividends next year in some cases. Hurst Nelson receded to 61s. 6d. and Gloucester Wagon to 16s. Beyer Peacock were 32s., North British Locomotive 18s. 6d., Vulcan Foundry 28s. 9d., and Wagon Repairs 15s. Charles Roberts dropped sharply to 105s.

Traffic Table of Overseas and Foreign Railways

	Railway	Miles open	Week ended	Traffics for week: Total this year	Traffics for week: Inc. or dec. compared with 1949/50	No. of week	Aggregate traffics to date: Total 1950/51	Aggregate traffics to date: Increase or decrease
South & Cen. America	Antofagasta ...	811	20.7.51	£ 137,090	+ £ 68,210	29	£ 3,377,400	+ £ 1,583,050
	Costa Rica ...	281	May, 1951	c566,653	− c467,774	47	c10,178,533	+ c694,685
	Dorada	70	June, 1951	36,543	+ 12,762	26	213,760	− 17,412
	Inter. Ctl. Amer. ...	794	May, 1951	$1,274,448	+ $190,877	22	$5,898,678	− $16,121
	Paraguay Cent. ...	274	20.7.51	£357,317	+ $163,994	3	$871,647	+ $274,650
	Peru Corp. ...	1,050	June, 1951	S/ 533,000	+ S/ 1,650,000	52	S/ 92,754,000	+ S/ 21,536,942
	" (Bolivian Section)	66	June, 1951	Bs. 15,767,000	+ Bs. 11,930,000	52	Bs. 160,349,000	+ Bs. 49,599,336
	Salvador	100	May, 1951	c138,000	+ c31,000	48	c1,867,000	+ c136,000
	Taltal	154	June, 1951	$1,675,315	− $259,455	52	$20,544,647	+ $2,959,409
Canada	Canadian National†	23,473	May, 1951	17,653,000	+ 1,809,000	22	82,112,000	+ 12,717,000
	Canadian Pacific† ...	17,037	May, 1951	12,462,000	+ 1,788,000	22	56,846,000	+ 8,518,000
Various	Barsi Light* ...	167	June, 1951	30,435	+ 1,447	13	113,112	+ 23,872
	Egyptian Delta ...	607	10.4.51	17,513	− 267	4	17,513	− 267
	Gold Coast ...	536	May, 1951	262,770	+ 5,883	8	556,234	+ 70,167
	Mid. of W. Australia	277	May, 1951	55,547	+ 19,139	48	454,081	+ 108,823
	South Africa ...	13,347	30.6.51	1,869,453	+ 207,421	13	24,463,009	+ 3,942,421
	Victoria	4,744	Mar., 1951	1,811,748	− 163,026	39	—	—

* Receipts are calculated at 1s. 6d. to the rupee † Calculated at $3 to £1